DOCUMENT RESUME

ED 084 778	EM 011 526
AUTHOR	Bias, Lewis V.; And Others
TITLE	A Retrospective Look At Educational Media Institute Programs in the U.S. Office of Education, 1965-71.
INSTITUTION	Maryland Univ., College Park. Leadership Training Inst.
SPONS AGENCY	National Center for Educational Technology (DHEW/OE), Washington, D. C.
PUB DATE	Jun 73
NOTE	171p.
EDRS PRICE	MF-$0.65 HC-$6.58
DESCRIPTORS	Career Ladders; College Teachers; Elementary School Teachers; Inservice Courses; Inservice Education; *Inservice Programs; *Inservice Teacher Education; *Institutes (Training Programs); *Media Specialists; *Program Evaluation; Secondary School Teachers; State of the Art Reviews
IDENTIFIERS	Educational Media Institute Programs

ABSTRACT

An analysis of educational media training institutes was conducted to assess the residual effectiveness of those programs upon participants, the institutions involved, and the overall media field. Pertinent literature and existing institute documents were reviewed and questionnaires sent to institute participants and directors. Significant results included the findings that participants valued their experiences and reported an increase in their media-related skills. They found better jobs at higher salaries and tended to move into influential administrative positions at the individual school or, less often, at the county, district, or other broad organizational level. College media programs were also strengthened as a result of these institutes and a multiplier effect was achieved since graduates were significantly involved in training their colleagues in the field. The study did not substantiate that the original objective of producing a sufficient number of trained personnel had been fully achieved, but it did support the conclusion that the institutes were an effective means of developing trained manpower to meet the needs spawned by the unprecedented growth of educational media and technology. Therefore, it was concluded that as personnel needs continue to grow, the institutes should continue to play an important role. (PB)

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A RETROSPECTIVE LOOK
at Educational Media Institute Programs
in the U.S. Office of Education, 1965-71

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June 1973

LEADERSHIP TRAINING INSTITUTE
(1972-73)

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The Leadership Training Institute is a project funded by the U.S. Office of Education's National Center for Educational Technology under the Education Professions Development Act. Opinions and conclusions expressed in this report do not necessarily represent U.S. Office of Education position or policy.

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ACKNOWLEDGMENTS

Concern and commitment of many persons are essential ingredients for the successful undertaking of a project such as this study of educational media institute programs. The project team was fortunate to find many persons willing to freely contribute their time and expertise.

John D. Colby, Clarence Fogelstrom and Larry Grayson, of the National Center for Educational Technology, provided much constructive criticism and guidance. They suggested types of information which would be of value for the direction of future training programs.

Concern and commitment were exhibited by many persons, but special thanks go to James W. Brown, Sidney Eboch, Dale Hamreus, Robert Jarecke, Charles Schuller, and Mendel Sherman for advice, criticism and support in numerous ways.

The data provided by participants and directors was of major value to the project. Many survey respondents went out of their way to provide constructive criticism, final reports, plans of operation, and proposals of media institutes.

The project staff is indebted to Barry Bratton who laid the groundwork for much of this study before he returned to Michigan State University.

Special thanks are due Darlene Summerfield, who spent endless hours at her typewriter preparing the manuscript for the printer, and to Andy Trohanis for many hours spent in completing the art work.

To the authors of the numerous studies and research projects which provided the foundation and basic structure for this study, the authors of the present study are greatly indebted. We do not claim to be the sole authors of the ideas presented here, but rather extend our thanks to the many contributors too numerous to mention.

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June 1973

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I. THE EDUCATIONAL MEDIA INSTITUTE PROGRAM:
HISTORICAL PERSPECTIVE

The Federal Role in Education

Until 1954 the prime role of the United States Office of Education (USOE) was to collect education-related statistics for the United States Congress. In 1954 the 83rd Congress passed the Cooperative Research Act to provide educational research and development funds for colleges, universities and state education agencies. In the same year, the National Science Foundation (NSF) was authorized to support curriculum revision for elementary and secondary science and mathematics.

Funding began in fiscal 1957 for the USOE's Cooperative Research Program and for the NSF's curriculum projects. Thus, the precedent for federal support was already established when Russia's first orbiting Sputnik precipitated a crisis in American education.

Many parts of the educational system were ready for overhaul:

> "One of the discoveries was the gross inadequacy of the instructional materials available to teachers. Textbooks were found to be attractive, readable, but usually badly outdated in content. Many students were studying material already obsolete, unimportant, and in some cases frankly wrong. While the process of creeping obsolesence was of longstanding, it became conspicuous and greatly accelerated by the explosive growth of knowledge after World War II."[1]

The National Defense Education Act of 1958 (NDEA) expanded the work already begun by the Cooperative Research Act and the National Science Foundation. NDEA recognized several needs which demanded immediate attention:

- additional trained manpower,
- curriculum revision,
- research, and
- information and communication.

The several Titles of NDEA (Public Law 85-864), as originally enacted, included:

Title I: General Provisions

2/ Title II: Loans to Students in Institutions of Higher Education

Title III: Financial Assistance for Strengthening Instruction in Science, Mathematics, Modern Foreign Language, and Other Critical Subjects

Title IV: National Defense Fellowships

Title V: Guidance, Counseling and Testing; Identification and Encouragement of Able Students

  Part A - State Programs
  Part B - Counseling and Guidance; Training Institutes

Title VI: Language Development

  Part A - Centers for Research Studies
  Part B - Language Institutes

Title VII: Research and Experimentation in More Effective Utilization of Television, Radio, Motion Pictures, and Related Media for Education Purposes

  Part A - Research and Experimentation
  Part B - Dissemination of Information

Title VIII: Area Vocational Education Programs

Title IX: Science Information Service

Title X: Miscellaneous

In October 1964, NDEA was amended to add Title XI, Institutes for Teachers. These were directed at teacher education, and the first educational media institutes were launched in 1965, funded under this new Title.

The injection of federal funds gave a new prominence to media in education. How did this come about?

The Development of Educational Media

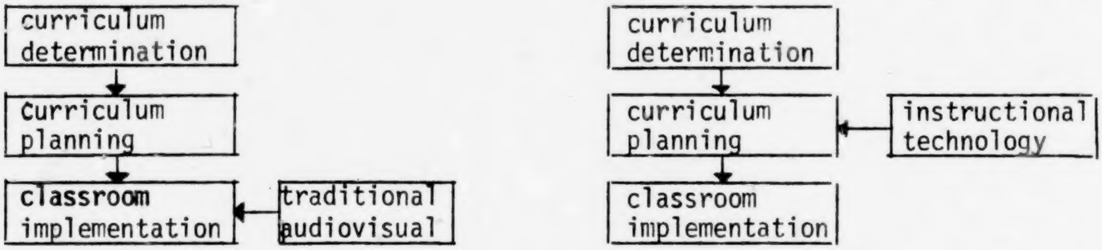
Films, a development of the last decade of the nineteenth century, gained widespread acceptance in education at the end of World War II. Educational radio and disc recordings grew with film and were supplemented--in some instances replaced--by television and audio tape recordings during /3
the 1950's. Also in the 'fifties' the language laboratory was introduced and programed instruction made its educational debut. In the early 'sixties' 8mm single concept films, instructional packages, and educational uses of computers were in various stages of research, development, and implementation. Funding from the NDEA greatly accelerated adoption of the newer media.

A major thrust for educational media came with the implementation of new curricula: curriculum projects were faced with the problem of obsolete teacher training programs, the need to retrain teachers, and the need to re-equip schools to implement the new curricula. Media provided an ideal delivery system to meet the needs of teachers and students.

For example, the Physical Sciences Study Committee (PSSC) introduced its curriculum using films, a textbook, and laboratory equipment which could be improvised by the student. Had the curriculum design been successfully implemented, the teachers would have been retrained by using the new materials. However, the films were either not available or not used by many teachers. The textbook was widely adopted, but standing alone was not sufficient for successful implementation of the new curriculum. Other curriculum groups faced similar problems, and, in almost every instance, they chose instructional media as a key element in disseminating and implementing the new curriculum.[2]

Heinich observed that in these projects the choice of instructional 4/ media has moved from the classroom teacher--the implementation level--to the curriculum planning level.[3] Figure 1 depicts this change:

Figure 1[4]


curriculum determination
curriculum planning
classroom implementation
traditional audiovisual
curriculum determination
curriculum planning
instructional technology
classroom implementation

The Entry of Traditional
Audiovisual Aids into the
Instructional Process
(Traditional Paradigm)

The Entry of Instructional
Technology into the
Instructional Process
(New Paradigm)

The new paradigm has another aspect. It avoids the excessive time lag in development of curriculum materials. The media/materials are integral to the curricula when it is introduced. The trend is to consider curriculum, not as a conventional paper outline, but as a systematically designed set of instructional materials and teacher guides.

For a time it was projected by some that the classroom teachers could be replaced by the new instructional materials, but it became increasingly obvious that the teachers and materials complemented each other. In the process, the teacher relinquished some control over selection and presentation of content, and assumed a greater role in the management of instruction.

Because the new curricula needed media for implementation, the training of teachers, and the training of teachers of teachers had to be revised to adjust to the changed materials and methodology. The new /5 techniques required new kinds of classroom environments, new kinds of materials and equipment, and teachers with skills in utilizing educational media. Personnel were also needed to generate the curriculum materials and to design, produce, test, revise, and disseminate them. The role of libraries began to change from the warehousing of books to learning resource centers. And the conventional egg crate school gave way to specialized learning areas including laboratories, open areas, individualized study carrels, and a renewed emphasis on the use of community resources.

The tremendous changes which were taking place in education in the early 1960's as a result of NDEA created a need for special training of educational media personnel.

Other Sources of Federal Support

NDEA was the major intervention into education: The programs initiated set trends for subsequent programs to provide media training for different sectors of the education community. For example, during the 'sixties' the Captioned Films for the Deaf program assumed a variety of education programs for the handicapped, including the training of teachers. The major federal laws which provided support for educational media are listed in Figure 2.

Figure 2

Federal Laws which Provided Support
for Educational Media

Year	Title of Act	Public Law
1958	National Defense Education Act	85-864
1958	Captioned Films for the Deaf	85-905
1962	Manpower Development and Training Act	87-415
1963	Vocational Education Act	88-210
1964	Elementary and Secondary Education Act	89-10
1965	Higher Education Act	83-329
1966	Adult Education Act	89-750
1968	Education Professions Development Act	90-35
1967	Public Broadcasting Act	90-129

The two laws which have provided the most significant funding for training of media personnel are the National Defense Education Act (NDEA) and the Education Professions Development Act (EPDA). The latter (EPDA) provided five specific programs to support areas of professional training not specifically included in other legislation. EPDA also assumed some training responsibilities phased out under the NDEA. EPDA programs were grouped as follows:

1) Teacher Corps (Part B, Subpart L)
2) Attracting and Qualifying Teachers to Meet Critical Shortages (Part B, Subpart 2)
3) Fellowships for Teachers and Related Educational Personnel (Part C)
4) Improving (Inservice) Training Opportunities for Personnel Serving in Programs Other than Higher Education (Part D)
5) (Inservice) Training Programs for Higher Education Personnel (Part E)

The educational media institutes program, with which this report is concerned, was funded under NDEA from 1965-68, and from 1969-71 under the EPDA. The total expenditure through Fiscal Year 1971 for educational media institutes was approximately $14 million. Figure 3 indicates the number of institutes, number of participants, and funding for each year, 1965-71. It should be noted that funding decreased during this period.

Figure 3

Institutes for Training Personnel in Educational Media
NDEA, TITLE XI and EPDA, Part D.
1965-1971

Fiscal Year	Number of Institutes	Approximate Number of Participants	Sum of Grant or Contract
1965	36	1371	$2,110,638
1966	38	1518	2,691,848
1967	34	1267	2,014,305
1968	34	1472	1,781,740
1969	16	1132	1,047,515*
1970	17	5006**	1,989,765**
1971	34	6004**	2,253,401**
Total	209	17,770	13,889,212

* Leadership Training Funds may be included in this figure.

**Figures include participants and funds for Special Media Institutes for Directors.

A similar number of institutes were offered in each of the first three years, and the number of participants remained about the same. The number of participants increased in 1970 and 1971 due to the addition of the Special Media Institutes 'multipliers'--the Instructional Development Institutes. These were short-term institutes for teachers
8/ and administrators to accelerate the acceptance of media and the newer methods of instruction.

The National Center for Educational Technology (NCET) currently administers the educational media institute program (now called the Educational Technology Training Program). The media institutes were initiated to develop additional manpower in an area of high priority; they have produced school and college teachers, administrators, and media specialists with a wide range of high-level media competencies.

A variety of studies, projects, and programs provided the needs assessment data for the design and implementation of the institutes. Some studies of special relevance are listed in Figure 4.

Figure 4

Federally-Funded Studies Relevant to Educational Media Training

Principal Investigator	Project TITLE	Year of Final Report
Ashum, L.E.	Education & Manpower for Librarianship	1968
Bloodworth, Mickey	DAVI Media Survey: Highlights of Schools Using Education Media	1967
Brown, J.W. and Thornton, J.W.	HEMS - Higher Education Media Study	1968

-- continued

Figure 4 -- continued

Principal Investigator	Project TITLE	Year of Final Report
Cogan, M.L. and Lancour, H.	Professional Education of Media Personnel (University of Pittsburgh)	1964
Case, Robert N.	School Library Personnel Task Analysis Survey	1969
Finn, James D.	Technological Development Project	1963
Godfrey, Eleanor	The State of Audiovisual Technology (1961-66)	1967
Hall, R.O., and Harcleroad, F.F.	Seminars on the Training of Educational Media Specialists	1964
Harcleroad, F.F.	Development of an Educational Plan for the Library-Audiovisual Services-Administration Building for the California State College at Hayward	1964
Larson, L. C.	Survey of Graduate Media Personnel Preparation Programs	1970
McMurrin, Sterling	Report of the Commission on Instructional Technology	1969
Martin, Ann M. and C. Walter Stone	A Study of Regional Instructional Media Resources	1965
Milkman, R.F.	The Professional Audiovisual Education Study	1969
Noel, F., et al.	States Audiovisual Education Study	1963
Perloff, E., et al.	Project Impact: A Pilot Study Evaluating the NDEA Summer Institute Programs	1970
Stone, C. Walter	AV Task Force Survey Report	1970
Wasserman, P. and Bundy, M.L.	The Maryland Manpower Project	1968

Studies Related to this Manpower Study

Of major importance to the LTI study are four related studies and their associated reports: The Educational Media Institute Evaluation (EMIE) Project,[5] the Knapp School Libraries Project,[6] the Jobs in
10/ Instructional Media Study (JIMS),[7] and the Media Guidelines Project.[8]

The Educational Media Institute Evaluation Project (EMIE)

The EMIE Project, directed by James W. Brown for the NEA's Department of Audiovisual Instruction and funded by the U.S. Office of Education under Title VII-B of the NDEA, was assigned the task of evaluating immediate and delayed effects of short-term Title XI educational media institutes. Data provided by the EMIE study was used to strengthen educational media training projects. EMIE also pointed directions for graduate programs and certification efforts throughout the country.

The EMIE Project ran for three consecutive years (1965, '66, '67) with reports for each year relative to objectives established by the EMIE staff for the particular year. Three major concerns were:

- How does attendance at an educational media specialist institute change participants--immediately, and over a period of time?
- In what ways do these institutes influence professional programs for the preparation of educational media personnel?
- What makes a 'good' educational media specialist institute?[9]

The data base to supply answers to these three questions was gathered pre-institute, during the institute, and post-institute. Of special interest to the LTI study are data gathered on the following:

a) participants characteristics (age, sex, experience, degree),

b) institute programs (objectives, content, activities),

c) adequacy of resources (facilities, equipment, staff),

d) change in participants competencies (responsibility levels and functional areas of media).

Findings of the EMIE Project team show institutes did much to change and improve participant's educational media competencies. The appropriateness of institute objectives was considered adequate by participants and the training received via educational media institutes was viewed as "better than anything" or "better than" much of the college instruction received in previous college studies[10]

Post-institute on-the-job activities performed by the majority of the participants included:

"a) implementation of media program plans developed during the institute or since the institute,
b) increased media responsibilities,
c) increased time devoted to media activities,
d) ...increased and improved uses of media by teachers with whom they work,
e) increased purchase of media, equipment and supplies,
f) increased influence upon the thinking and actions of teachers and administrators with respect to new media matters, and
g) increased salaries."[11]

Data gathered reflected positive changes in institutional programs directly attributable to the media institute program: there was increased attention to regular professional media preparation programs, improved course content, increased enrollment, change in instructional organization 12/ and teaching practices, increased attention by 'content' fields, and an increased need for instructional materials.[12]

Among the desirable qualities of a 'good' educational media institute as identified by the EMIE team were two of particular importance to this LTI study: First, the institute was 'varied' as to types of instruction and learning activities; second, the institute was 'innovative'--often employing quite different instructional procedures and formats.[13, 14]

The School Libraries Manpower Project

Funded by the Knapp Foundation of North Carolina, Inc., the School Libraries Manpower Project was planned and carried out by the American Association of School Librarians. The project staff was to investigate and make recommendations concerning three aspects of development and utilization of school library manpower:

- task and job analysis of duties performed by library professionals,
- education for school librarianship, and
- recruitment from specific manpower pools.

As a final step of the task and job analysis, a classification scheme for media-related school library positions was produced. The positions are:

- School Library Media Specialist,
- Head of School Library Media Center,
- District School Library Media Director, and
- School Library Media Technician.[15]

With four classes or levels of responsibility identified, complete with task and functions, this aspect of the School Libraries Manpower /13
Study is of particular importance to the LTI study; findings significantly impinge upon the development of training programs for personnel at professional and nonprofessional levels, the development of certification programs, and formulation of job descriptions. From the task analysis, a foundation has been layed for evaluation of school library training programs and improvement of school libraries.

Jobs in Instructional Media Study (JIMS)

> "The rapid growth of the instructional media field in recent years has resulted in a lack of definition and shortage of trained personnel."[16]

This need, verbalized in the final report of the JIMS Study,[17] recognized more trained nonprofessional support personnel are needed to perform tasks which do not dictate academic credentials. The study focused on training of 'media support' or 'paraprofessional level' personnel and sought generally to produce

> "1. An analysis of jobs currently performed at all levels of the instructional media field.
>
> 2. A systematic clustering of tasks with an emphasis on the paraprofessional level, which could become an articulated career ladder.
>
> 3. Guidelines for training programs which will provide the competencies needed to perform the tasks as they have been analyzed."[18]

Using a technique applied earlier in the Martin and Stone study,[19] the JIMS staff applied the functional job analysis approach to

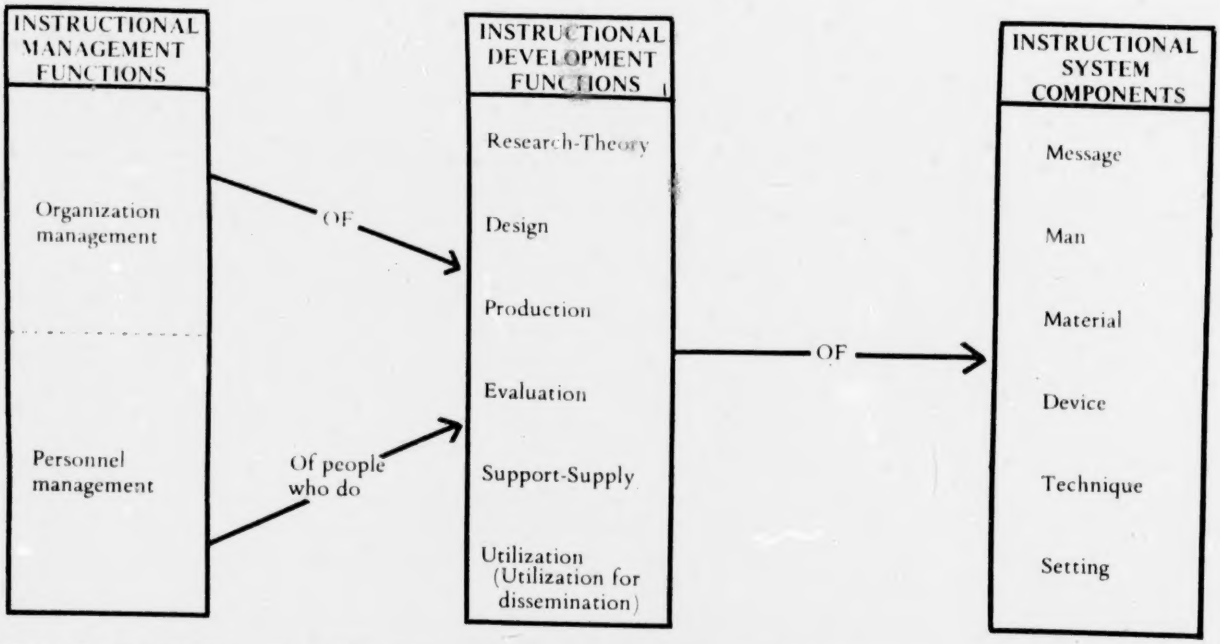
a) describe what workers do,
b) systematically classify the task involved,
c) regroup tasks in a cluster of tasks, and
d) establish levels of educational development necessary to perform the tasks. 14/

Paraprofessional media job activities in public schools, higher education, business, industry, military and government were analyzed.

From the job analysis, the JIMS staff developed a model of the Domain of Instructional Technology (Figure 5). Instructional Management Functions and Instructional Development Functions are displayed in relation to an instructional system.

Figure 5

Domain of Instructional Technology[20]


INSTRUCTIONAL MANAGEMENT FUNCTIONS
Organization management
Personnel management
OF
Of people who do
INSTRUCTIONAL DEVELOPMENT FUNCTIONS
Research-Theory
Design
Production
Evaluation
Support-Supply
Utilization (Utilization for dissemination)
OF
INSTRUCTIONAL SYSTEM COMPONENTS
Message
Man
Material
Device
Technique
Setting

SCOPE OF THE MODEL: (1) The Instructional Development and Management Functions are considered only as they apply to the Instructional System Components.
(2) System Components are considered Instructional if, and only if, the intent of their Design or Utilization objectives is to bring about learning.

A 'function' does not represent a 'job', but is defined as

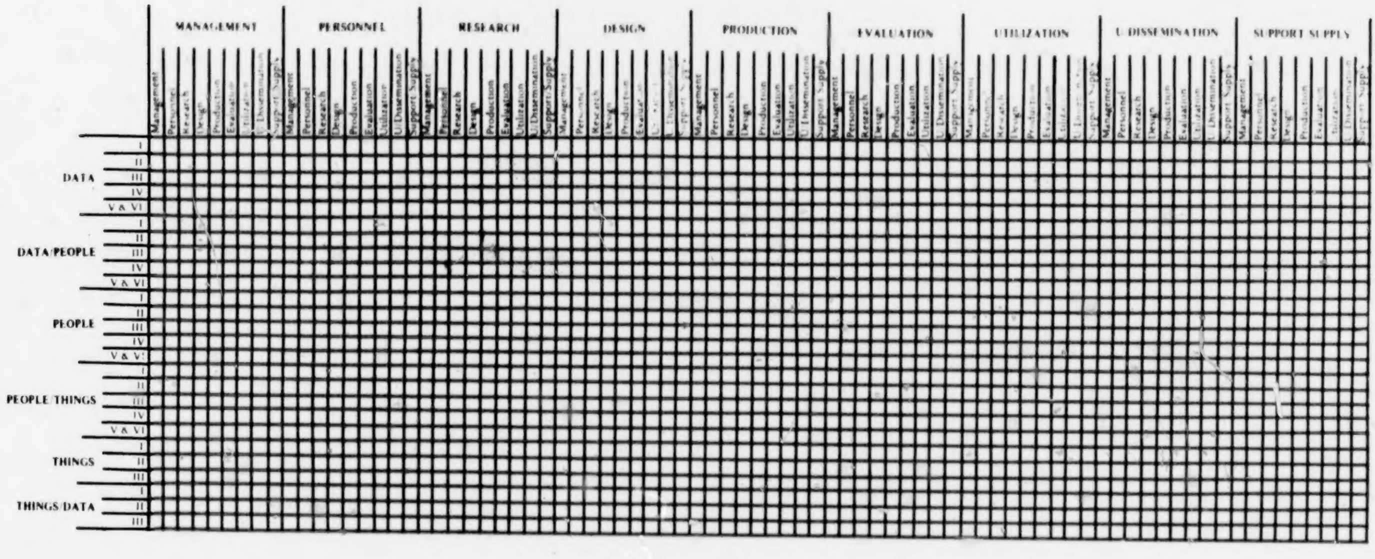
> "A unique cluster of goals and activities which play a similar role in the development and management of Instructional Systems Components, and which play a different role from that played by the goals and activities in the other cluster."[21]

The functional descriptors enable one to describe a job or potential job position. /15

From the Domain of Instructional Technology model (Figure 5) evolved a matrix (Figure 6) in which the JIMS team developed twelve basic alternatives for curriculum guidelines and coordinated job structures. From this effort came job performance standards for media

Figure 6

Functional Job Analysis/Domain of Instructional Technology Matrix[22]


MANAGEMENT
PERSONNEL
RESEARCH
DESIGN
PRODUCTION
EVALUATION
UTILIZATION
U-DISSEMINATION
SUPPORT SUPPLY
Management
Personnel
Research
Design
Production
Evaluation
Utilization
U-Dissemination
Support Supply
DATA
DATA/PEOPLE
PEOPLE
PEOPLE/THINGS
THINGS
THINGS/DATA
I
II
III
IV
V & VI

personnel, training curricula to develop job competencies, a scaling or worker instructions based on complexity, a scaling of worker functions with data, with people, and with things to create a hierarchy and general educational development for various personnel.

16/ The JIMS model and matrix identify possible curriculum alternatives and instructional strategies for personnel training and are of major importance to program developers, certification committees and personnel evaluators. For the LTI study, the JIMS matrix provided a basis for describing responsibility levels and specific media functions of educational media institute graduates.[23]

Media Guidelines Study

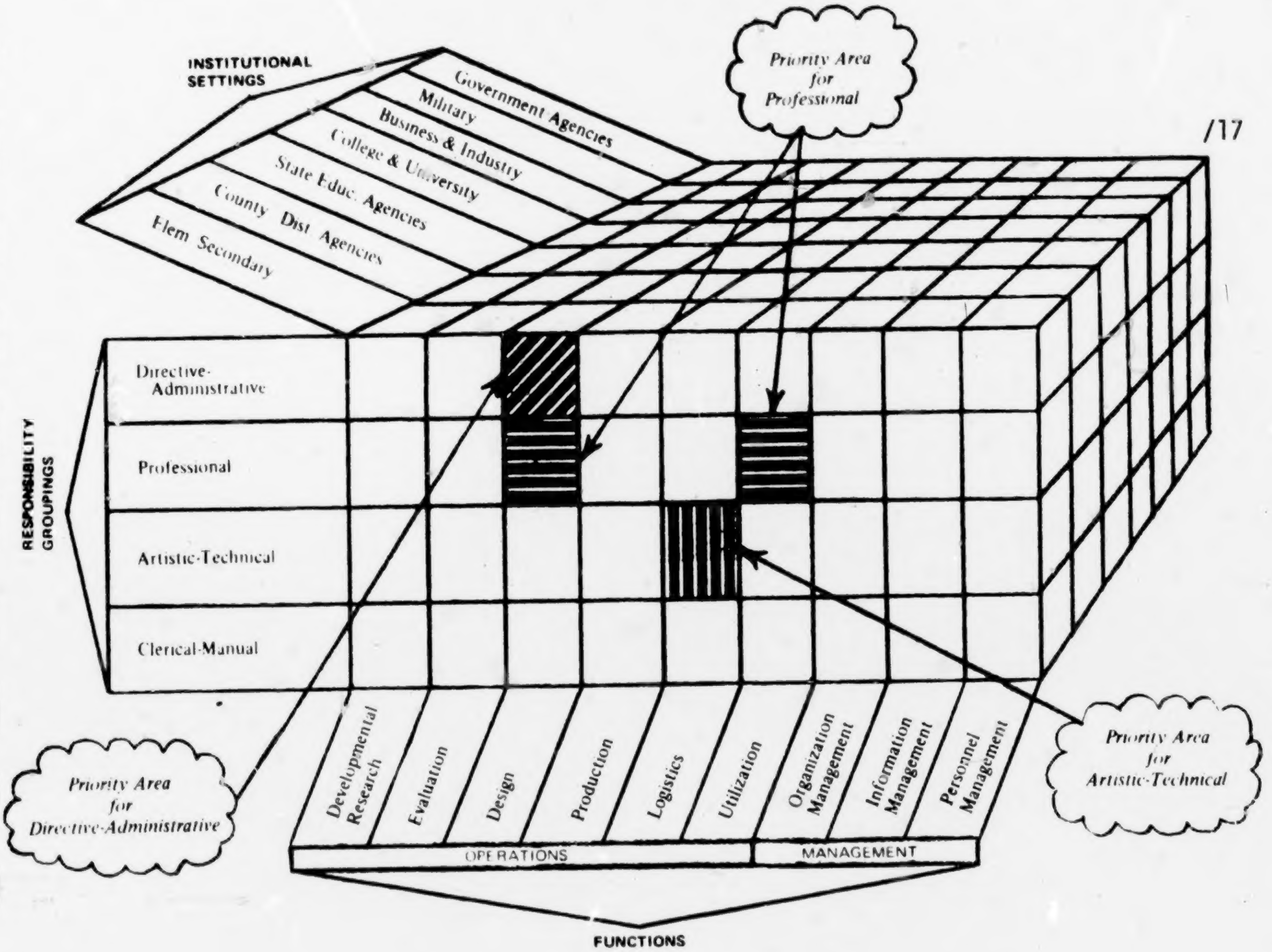
The Media Guidelines Study was carried out by Dale Hamreus as an activity of the Leadership Training Institute for Media Specialists (Oregon State System of Higher Education). Intensive job analysis and clustering techniques were also employed in this study to identify and describe competencies being performed in managing, developing, and utilizing media in instruction. The project's purpose was to "produce guidelines and other information for planning media training programs and evaluating media-related training program outputs."[24]

Hamreus's conceptual model of the media domain, Figure 7, established media functions in relation to institutional setting, responsibility groupings, and functions of media-related jobs.

For purposes of his model, Hamreus defined 'responsibility' and 'function' in operational terms. Media responsibilities assumed and

Figure 7

Three Dimensional Structure for Organizing Media-Related Training Requirements[25]


INSTITUTIONAL SETTINGS
Government Agencies
Military
Business & Industry
College & University
State Educ. Agencies
County Dist. Agencies
Elem Secondary
Priority Area for Professional
RESPONSIBILITY GROUPINGS
Directive-Administrative
Professional
Artistic-Technical
Clerical-Manual
Developmental Research
Evaluation
Design
Production
Logistics
Utilization
Organization Management
Information Management
Personnel Management
OPERATIONS
MANAGEMENT
FUNCTIONS
Priority Area for Directive-Administrative
Priority Area for Artistic-Technical

performed by media personnel at various institutional settings, were grouped as follows:

- **Directive-Administrative**: Grouping includes job activities that represent top administrative and management responsibilities which are necessary to control media operations.
- **Professional**: Grouping includes job activities that are responsible to work directly in the use of media with learners and learning problems.
- **Artistic-Technical**: Grouping includes job activities that are responsible to work directly with media in support of the professional type activities, e.g., graphics artist, photographer, etc.

Clerical-Manual: Grouping refers to job activities that are necessary to support all other media-related jobs.[26]

'Functions' of media-related jobs are the activities deemed essential to the process of efficiently operating a media service:

Research: To generate and test theory, develop products and the methodology of instructional media.

18/ Evaluation: To provide information to those individuals responsible for instructional programs to allow them to make appropriate adaptive decisions regarding the management, development, and utilization of media in instruction.

Design: To translate theory and empirical evidence about learners, subject matter, mediating forms, settings and techniques into instructional systems specifications.

Production: To make specific instructional products by following design specifications and artistic standards.

Logistics: To provide acquisition, storage, supply and maintenance support to the appropriate operations and management of media in instruction.

Utilization: To employ media in an instructional setting for the purpose of bringing about desired specific changes in learners.

Organizational Management: To plan, establish and maintain the organizational structure necessary to support the activities required in the operation and management of media services.

Information Management: To plan, establish and maintain the means for supplying essential information, both internal and external, necessary to the operation and management of a media service.

Personnel Management: To provide qualified and adequately prepared staff for the operations and management of a media service.[27]

Once defined operationally, responsibilities for each level may be established and refined, enumerating acceptable competencies for each level.

On the basis of data collected and literature reviewed, Hamreus summarized the status of training in each of the nine 'functions' of media-related jobs. He concluded:

> (1) Little training is provided in the research and development function.
> (2) In relation to all functions, evaluation is the weakest.
> (3) Trained individuals in the design function are rare but eagerly sought.
> (4) Training for the production function--with minor exceptions--appears to be adequate to meet needs.
> (5) Greatest training emphasis is for the logistics function and appears adequate.
> (6) Attempts at training for utilization functions appear less frequent and do not capture large audiences.
> (7) For management functions (organization, information, personnel) there is practically no formal training.[28]

* * *

Summary

In this chapter we have reviewed the federal role in funding of educational media institute training. We have also reviewed the most relevant assessments of educational media manpower/training needs. It is against this background that the LTI staff sought more specific answers to questions of residual effectiveness of the educational media institute experience: both for the graduates of those institutes and for the colleges and universities at which the institutes were conducted.

Footnotes

[1] U.S. Office of Education, *Educational Research and Development in the United States* (Washington, D.C.: Government Printing Office,
20/ 1969), p. 45.

[2] For example, the Physical Sciences Study Committee (PSSC), the Biological Sciences Curriculum Study (BSCS), and the School Mathematics Study Group (SMSG).

[3] Robert Heinich, *Technology and the Management of Instruction*, Monograph No. 4 (Washington, D.C.: Association for Educational Communications and Technology, 1970), Chapter 5, pp. 103-49.

[4] Ibid, combination of Figure 4, p. 117 and Figure 5, p. 125. "Traditional" and "New Paradigm" italic headings added for clarity in the context of this paper.

[5] James W. Brown et al, *Educational Media Institute Evaluation Project: Evaluation of Summer, 1965, NDEA Institutes* (San Jose, California: Educational Media Institute Evaluation (EMIE) Project, November 1965), 75 p.; James W. Brown et al, *Educational Media Institute Evaluation Project/Department of Audiovisual Instruction: Evaluation of Summer 1966 NDEA Institutes for Educational Media Specialists and School Library Personnel* (San Jose: EMIE Project, 1966), 57 p.; James W. Brown, *Educational Media Evaluation Project: Supplementary Report* (San Jose: EMIE Project, 1967) 40 p.

[6] Peggy Sullivan (editor), *Realization: The Final Report of the Knapp School Libraries Project* (Chicago: American Library Association, 1968), 398 p.

[7] C. James Wallington et al, *Jobs in Instructional Media* (Washington, D.C.: Association for Educational Communication and Technology, 1969), 304 p.

[8] Dale Hamreus, "Current Training Requirements and Recommendations for a Media Specialist Program," *Media Manpower*, Supplement No. 1 (January 1970), 8 p.

[9] Brown, 1967, p. 3.

[10] Ibid, p. 34.

[11] Ibid, p. 35.

[12] Ibid, pp. 24-29.

[13] Ibid, pp. 29-33.

[14] See especially Chapter 5, "Summary and Conclusions," beginning page 72 of this report.

[15] Research Division, National Education Association, *School Library Personnel: Task Analysis Survey* (Chicago: American Library Association, 1969) pp. 19-84.

[16] Wallington et al, p. 1.

[17] The JIMS project was funded by the U.S. Office of Education and carried out by the Association for Educational Communications and Technology (formerly the Department of Audiovisual Instruction), Washington, D.C.

[18] Wallington et al, p. 7.

[19] Ann M. Martin and C. Walter Stone, *A Study of Instructional Media Resources* (Pittsburgh: University of Pittsburgh, 1965), 80 p.

[20] Wallington et al, p. 12a.

[21] Ibid, p. 11.

[22] Ibid, p. 31.

[23] See especially pages 39-44 of this report.

[24] James W. Brown, "Recent Manpower Studies: Some Implications for AECT, *Media Manpower*, Supplement No. 2 (March 1971), p. 6.

[25] Hamreus, January 1970, p. 3.

[26] Jack V. Edling and Dale G. Hamreus, *Final Report: LTI Media Specialists Program - 1969-70* (Monmouth, Oregon: Teaching Research Division, Oregon State System of Higher Education, 1970), Appendix G, p.6.

[27] Ibid, pp. 7 and 8.

[28] Hamreus, p. 6.

[29] Brown, March 1971, p. 6.

II. METHODOLOGY

Purpose of the Study

As a first step in a proposed long-range study of educational media/technology manpower training needs, the LTI staff sought to carry out a retrospective analysis of educational media institute training funded under Title XI of the National Defense Education Act and Part D of the Education Professions Development Act.

The LTI staff sought pre, during, and post-institute information pertinent to participant/graduates and institute programs themselves (i.e., characteristics of participants, job-related data, learning experiences considered most beneficial, institutional changes attributable to the educational media institute experience, etc.).

In addition, the study sought to extend some of the findings reported by the Educational Media Institute Evaluation Study[1] and to utilize the works of Hamreus,[2] and Wallington[3] to determine if the institute graduates are functioning differently after completing institute training.

Methodology

The study employed two basic approaches: (1) a review of pertinent literature and existing institute documents; and (2) a questionnaire survey of directors and institute graduates.

Literature Search

The literature review included a search of the Education Research Information Center (the ERIC system), the National Technical Information

Service, Dissertation Abstracts, and the Current Index for Journals in Education, for references pertinent to educational media/technology manpower training. Through correspondence and personal conversations, a number of additional documents were discovered. Those references considered pertinent by the LTI staff are presented in the Bibliography of this report.

Review of Existing Institute Documents. Specific institute documents were considered important to this study: institute proposals, plans of operation, and final reports. It was hoped these documents could be obtained from the U.S. Office of Education's National Center for Educational Technology (NCET) files, or from the institute directors. For various reasons, the NCET files were found to be incomplete.

Letters were sent to the institute directors for those institutes for which no documents were on file at NCET (see letter in Appendix D). Some documents were received by this means; however, many directors reported such documents had been discarded.

The LTI staff was able to identify only 50 percent of the 1971 participants because of incomplete documentation.

The Questionnaire Survey

The second approach employed in this study was the collection of data for directors and participant/graduates via questionnaires.

Population. A review of grant awards under NDEA, Title XI, and EPDA, Part D, indicated some 209 educational media institutes, involving 17,770 participants were funded from 1965 through 1971 (see Figure 7).

The participant population--all 17,770--was considered too large and too costly to survey with the allotted time, manpower and budget. Therefore, it was decided to survey all directors for all years, 1965-71, but to survey only the participant/graduates for the years 1966, 1968 and 1971.
24/ A list of the institutes for these years is included as Appendix E.

Names and addresses of directors were identified from the U.S. Office of Education documents. Participants' names and addresses were identified from the institute final reports, lists provided by institute directors, and the 1966 mailing list of the EMIE study. As was noted under "Review of Existing Institute Documents" above, unavailability of documents--especially for 1971--presented a major 'snag' in carrying out the questionnaire survey.

The Instruments. Two questionnaires were developed by the LTI staff: one for institute participant/graduates and another for institute directors. As noted earlier in this chapter, the staff attempted to build on the work of James Brown, Dale Hamreus and Jim Wallington[4] in the development of the instruments. The questionnaires are included as Appendix C and D.

The instruments developed were reviewed by educational technology faculty members at Indiana University, Ohio State, Michigan State, and the University of Maryland, as well as by graduate students in educational technology at the University of Maryland. Staff members of the National Center for Educational Technology (U.S. Office of Education) also provided assistance in developing the instrument.

After the above-described review, the two instruments were revised and duplicated. A total of 170 questionnaires were mailed to institute directors for all years, 1965-71 inclusive, and some 2,351 questionnaires to participant/graduates of educational media institutes for the years 1966, 1968 and 1971.

Cover Letters. Each questionnaire was accompanied by a signed cover letter and a stamped, addressed, return envelope. The rationale and importance of the study were explained. Copies of these letters appear in Appendix C and D.

Follow-up. As stated above, questionnaires were mailed to all directors for 1965 through 1971, inclusive. Directors responsible for more than one media institute were asked to complete only one questionnaire for a designated institute in the years 1966, 1968, or 1971. Four weeks after the initial mailing, a follow-up letter was sent to directors who failed to respond. A third mailing was sent in a further attempt to augment the sample.

As was noted under population, questionnaires were sent to all identified participant/graduates attending educational media institutes during 1966, 1968 and 1971. Due to time, manpower, and budget constraints, no follow-up was sent to institute participants.

Response. The response to both survey instruments is summarized in Figure 8. From the net participant/graduate sample, there was a 42.8 percent return; and from the net director sample, there was a 45.7 percent return.

Figure 8

Response to LTI Questionnaires

	Participants		Directors	
Number of questionnaires mailed	2,351		170	
Number returned 'addressee unknown'	801		19	
Net sample available for this survey	1,550	100.0%	151	100.0%
Completed questionnaires	664	42.8	69	45.7
No response	886	57.2	82	54.3

Limitations

Other than the natural limitations of the investigators, several limitations which threatened the validity of this study were identified:

In retrospect, the time schedule, manpower, and funding were not sufficient to produce optimum survey response and analysis. Although a time extension was requested and granted for the purpose of completing the final report, budget and staff limitations did not permit consultation with leaders in the field to gain independent interpretations once the data had been collected.

A major hindrance in compiling a more comprehensive data base was the incompleteness of educational media institute records (final reports, proposals, plan of operations) and the inability to locate, due to the passage of time, many of the participants whose addresses had changed since institute participation. The incompleteness of records accounts for the LTI staff's inability to identify 50 percent of 1971 graduates.

Another limitation was the length of the questionnaires. Although some areas of importance were eliminated to reduce the amount of time required to complete the questionnaire, the length of the questionnaire may have been a causitive factor in the less-than-overwhelming return. Instructions for completing the questionnaire noted at least 30 minutes time would be necessary; however, several respondents indicated they spent considerably more than 30 minutes completing the questions.

Some semantic differences in the wording of the questions presented a threat to validity where pre and post institute data are compared; however, a careful perusal of the data convinced the authors that this did not significantly effect validity.

Many of the kinds of information sought in the questionnaire cannot be subject to statistical analysis. The interpretation of such data by the authors may not be the only possible interpretation, and the reader is encouraged to use the raw data to extrapolate his own findings.

Footnotes

[1] James W. Brown et al, *Educational Media Institute Evaluation Project: Evaluation of Summer, 1965, NDEA Institutes* (San Jose, California: Educational Media Institute Evaluation (EMIE) Project, November 1965), 75 p.; James W. Brown et al, *Educational Media Institute Evaluation Project/Department of Audiovisual Instruction: Evaluation of Summer 1966 NDEA Institutes for Educational Media Specialists and School Library Personnel* (San Jose: EMIE Project, 1966), 57 p.; James W. Brown, *Educational Media Evaluation Project: Supplementary Report* (San Jose: EMIE Project, 1967) 40 p.

[2] Dale Hamreus, "Current Training Requirements and Recommendations for a Media Specialist Program," *Media Manpower*, Supplement No. 1 (January 1970), 8 p.

[3] C. James Wallington et al, *Jobs in Instructional Media* (Washington, D.C.: Association for Educational Communication and Technology, 1969), 304 p.

[4] Brown, 1965, 1966, and 1967; Hamreus, 1970; Wallington, 1969.

III. PARTICIPANT/GRADUATES SURVEY:
FINDINGS AND INTERPRETATIONS

The participant/graduate survey provided data from the time of entry into the institute, data on the institute program itself as perceived by the participant/graduate, and data on the participant/graduate at the time of the survey (school year 1972-73). The institutes were analyzed in terms of content, method, and relevance of the institute experience to the participant/graduate in his or her current position. The impact on the professional lives of the participants is explored in terms of professional and academic advancement, job mobility and economic advantages. /29

The impact of the institute program on the field of educational media/technology is measured by the number of institute graduates, the kinds of positions they now hold, and the number of workshops they have personally conducted as 'multipliers' of their institute experience.

Participant/Graduate Characteristics

Age. The average participant was 39 years of age at the time of the institute. This suggests most participants were well established in their profession and were returning for special inservice training in media. Table A-9 (Appendix A) shows the age distribution for the three years surveyed. The greatest percentage of participants fall into the 36-to-40-years-of-age category. It seems long-term institutes were especially attractive to persons who had sufficient years of service to warrant a sabbatical or leave of absence in order to increase their media competencies.

Sex. The responses indicate increased female participation from 1966 through 1971, but the institute enrollment has been dominantly male. The percentage of males decreased from 84.6 percent in 1966 to 65.3 percent in 1968, and decreased further to 61.1 percent in 1971 (see Table A-1, Appendix A). The increase could be attributed in part to the trend for librarians to include nonprint media in library resource centers, and also to an increasing public consciousness of civil rights and discriminatory practices which previously may have discriminated against women applicants.

The overall gain in female participation is greatest for the group whose media-related activities represent '50%-or-more' of their present work load.* However, the increase is not consistent from year to yea as shown in Table A-1.

Time in Present Assignment and Total Years in Media. Based on the total number of responses received, the greatest percentage of graduates have spent one-to-eight years in their present media assignment, the peak being in the five-to-eight year range (See Table A-2, Appendix A). This remains relatively constant for the 1966 and 1968 graduates. The 1971 graduates have spent less time in their present jobs; 65 percent have been in their present media assignment for only one-to-four years. From the distribution of the earlier years (1966 and 1968), one could assume the respondents are well established in their present media assignments. As would be expected, the 1971 graduate data shows fewer years of experience.

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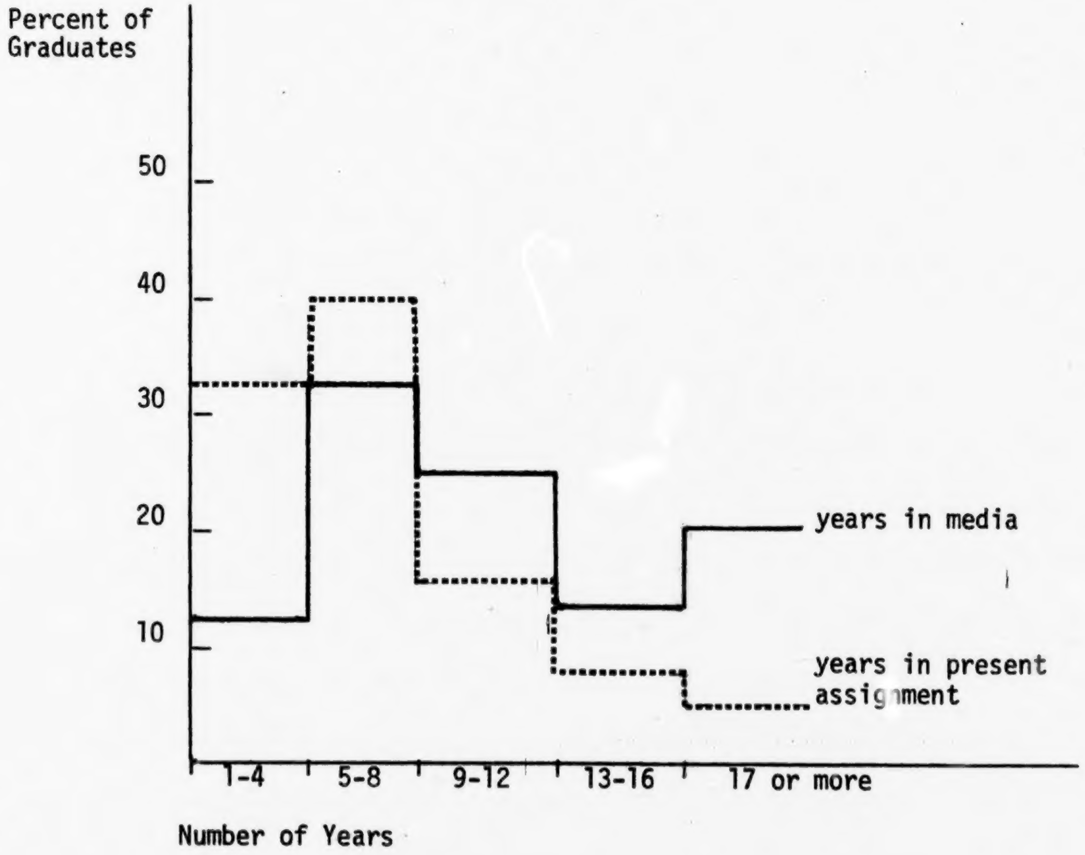
*In this report, the terms, 'responsibilities', 'work load', and 'work time' are used synonymously when discussing percentage of the total job.

Of the respondents who attended the 1966 and 1968 educational media institutes, 55-60 percent have been in media-related work between five and twelve years (See Table A-3, Appendix A). Those indicating they have been in media-related work for seventeen years or more comprise 19.9 percent of the total population.

Figure 9 compares the total number of years in media with the number of years in present media assignment. The majority of people with one-to-four years in their present assignment have been in media for more than four years. There may also be some who entered the media field as a result of attending a media institute. At the other end of

Figure 9

Years in Present Assignment and Years in Media-Related Work



the scale, people with over eight years in media have not occupied their present jobs for a corresponding length of time. This includes approximately one third of the nine-to-twelve years in present job, one half of the thirteen-to-sixteen years in present job, and two thirds of the group with seventeen-or-more years in their present job. From this data it seems that after ten years in a position it is increasingly likely that a media person will either move to a new position, or be promoted to a higher position.

Academic Advancement

Baccalaureate degrees were held at institute entry by 33.2 percent in 1966, with a corresponding decrease (27.3 percent to 24.5 percent) at entry in later institutes. The overwhelming number of participants (65.6 percent) held master's degrees at the time of entry into the institute. The percentage steadily increased from 64.2 percent in 1966 to 71.1 percent in 1971. Entry level above the master's degree constitutes 2.6 percent of the 1966 participants, 5.8 percent of the 1968 participants, and 3.8 percent of 1971 participants. Overall, there was an increase in the academic entry level of participants for successive institutes (See Table A-4, Appendix A).

A comparision of participants in the groups whose post institute media responsibilities represent '50%-or-more' of their work load with those whose media responsibilities represent 'less-than-50%' of their work load shows that at the time of the institute, the former group had less academic training. Of those reporting post institute media responsibilities exceeding 50 percent of workload, 62.5 percent held a master's degree at the time of the institute; of the 'less-than-50%' group, 67.5 percent held a master's degree. The percentage of specialist and doctoral degrees was also higher in the 'less-than-50%' group. This difference in academic entry level may be partially explained by the different career motivations of applicants in administration compared to those working with media. The media person was probably attracted by institutes which would give him credit toward a higher degree in his field. The administrator may have been motivated by the opportunity to learn a new discipline. Also, where institute directors were selecting applicants in areas peripheral to media, they would tend to select persons who were highly qualified in their primary field (See Table A-4, Appendix A).

As might be anticipated, many participants applied academic credits earned during the institute toward a higher degree program. Comparing the degree status at the time of the LTI survey (Table A-5, Appendix A) with that at the time of entry into the institute (Table A-4), there is an overall drop in the number of graduates whose highest degree is a baccalaureate from 30.4 percent to 15.3 percent, indicating that about half of these participants have since graduated. There is a proportionate increase in the number of higher degrees: The number whose highest degree was at the master's level increased from 65.6 percent to 72.7 percent. Those beyond the master's level increased from 3.8 percent to 11.9 percent. It is probable that some, and perhaps many, of those chosen to participate in the institutes would eventually have sought higher degrees. However, there is little doubt the institutes provided a strong incentive for experienced professionals to seek advanced training.

Comparision of participants whose current media responsibilities consume '50%-or-more' of the graduates' work load with those who spend 'less-than-50%' shows the former to have a greater number of advanced degrees. This is the reverse of the overall degree status at the time 34/ of institute entry where this same group held less academic qualification. Figure 10, "Participant Degree Status," shows this change graphically. It can be interpreted that those participants whose media responsibilities are greatest are most likely to utilize their media institute experience to complete a higher degree. If this is so, the trend should be greater for the 1966 and 1968 institutes, since the 1971 participants may not have had time to complete their degree requirements except at the master's level where the degree can often be completed in one or two years. However, this is only partially evidenced in Figures 11, 12 and 13.

The number of baccalaureate degrees decreased for each of the three samples as institute graduates advanced to higher degrees: The number of baccalaureate degrees decreased to less than one third for 1966, about one half for 1968, and to almost two thirds for 1971 participants with media responsibilities of '50%-or-more'. For the 'less-than-50%' group, the reduction was much less in the first two samples, representing about one half and two thirds, respectively. The 1971 years seem anamalous since all 'less-than-50%' persons advanced to the master's level. This could be attributed in part to the increasing number of persons relying on institutes to (at least partially) support them in degree programs. It should also be noted less people were admitted at the baccalaureate level in the later institutes.

Figure 10

Participant Degree Status Pre and Post Institute
(average of three years surveyed)

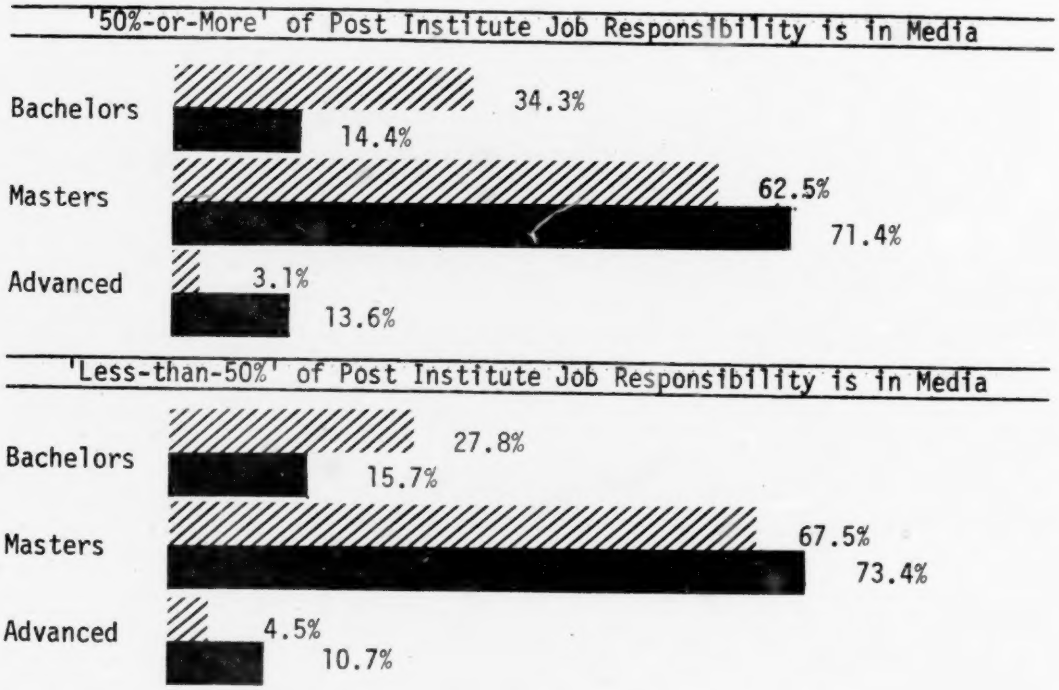


Figure 11

Participant Degree Status Pre and Post 1966 Institute

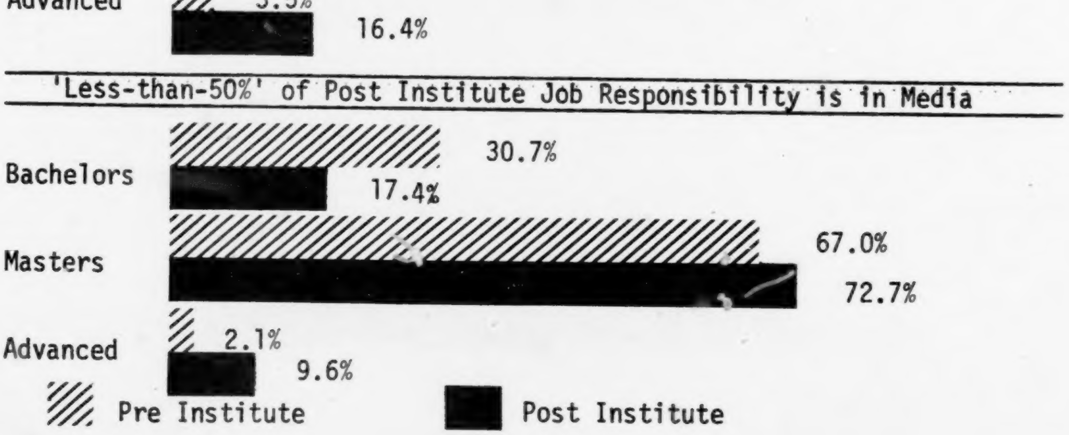


Figure 12

Participant Degree Status Pre and Post 1968 Institute

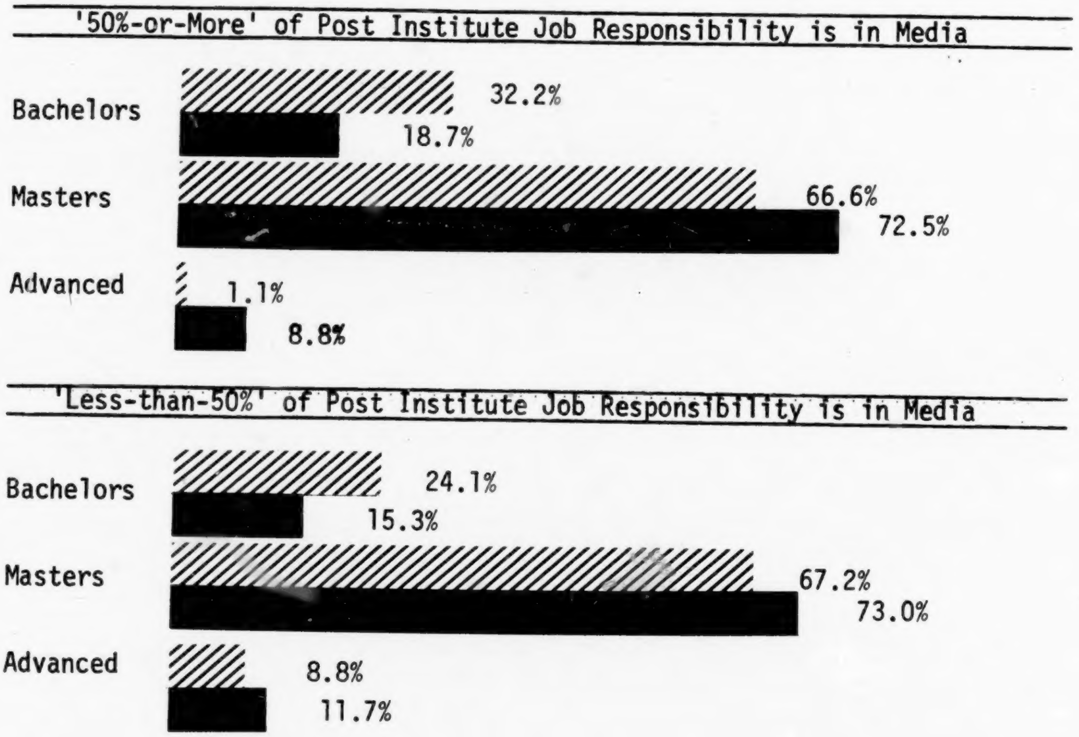
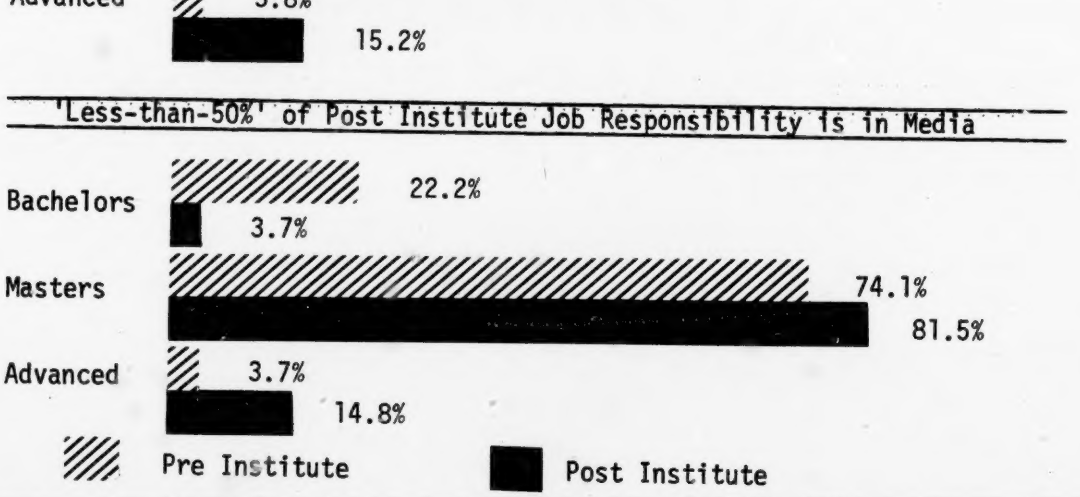


Figure 13

Participant Degree Status Pre and Post 1971 Institute



Master's degrees increased markedly, but the graphs are more difficult to interpret since this is a transition degree. Some persons rise to it from the bachelor's level while others move on to higher degrees. Leveling of the graph for the '50%-or-more' group suggests an increasing urgency to achieve a higher degree status. Approximately half of those who entered the 1966 and 1968 institutes with a bachelor's degree still reside at the master's level.

In the 1971 institutes, the upward mobility was greater and the number who advanced to the post-master's level was equal to the number graduating from the bachelors to master's level. This could be attributed to the larger number of year-long institutes in 1971. It may also be partially due to the inclusion of some students, already in the higher degree programs at the institute site, into the media institute program. The percent of the 1971 group who achieved advanced degrees is comparable to that of the 1966 graduates. A similar trend for increasing upward mobility is apparent for the 1971 graduate group whose present work load is 'less-than-50%' media-related.

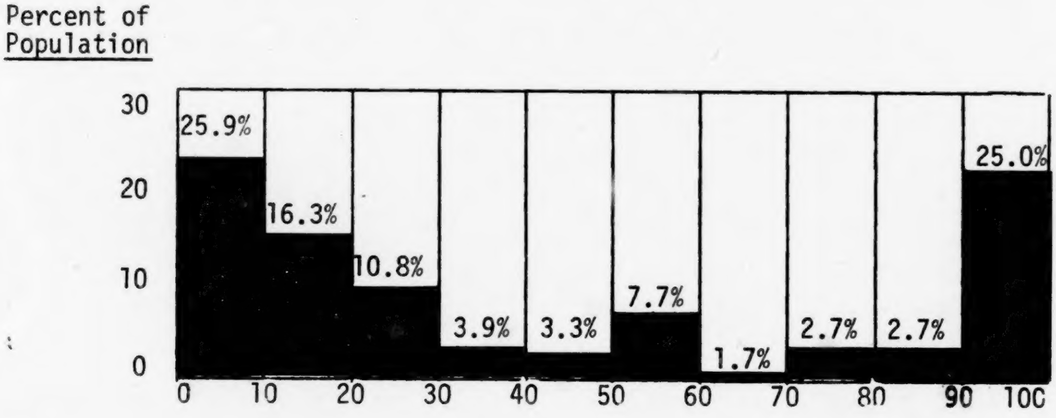
Figures 10, 11, 12 and 13 are derived from Tables A-4 and A-5, Appendix A.

Media Responsibilities and Professional Advancement

Percentages of Work Load Which is Media-Related. The graduates surveyed were asked to categorize the percentage of their present work load which is media-related. Table A-9 (Appendix A) shows the distribution of responses. The peaks appear at both ends of the scale (0 to 20 percent, 90 to 100 percent) with a small node in the middle of the scale. Figure 14 shows the relationship explicitly.

Figure 14

Percent of Graduates' Responsibilities Which are in Media



Percent of Graduates' Responsibilities in Media

For statistical purposes it was decided to categorize the graduates into two groups: (1) those whose media responsibilities are '50%-or-more' of their present work load, and (2) those whose media responsibilities are 'less-than-50%' of their present work load.

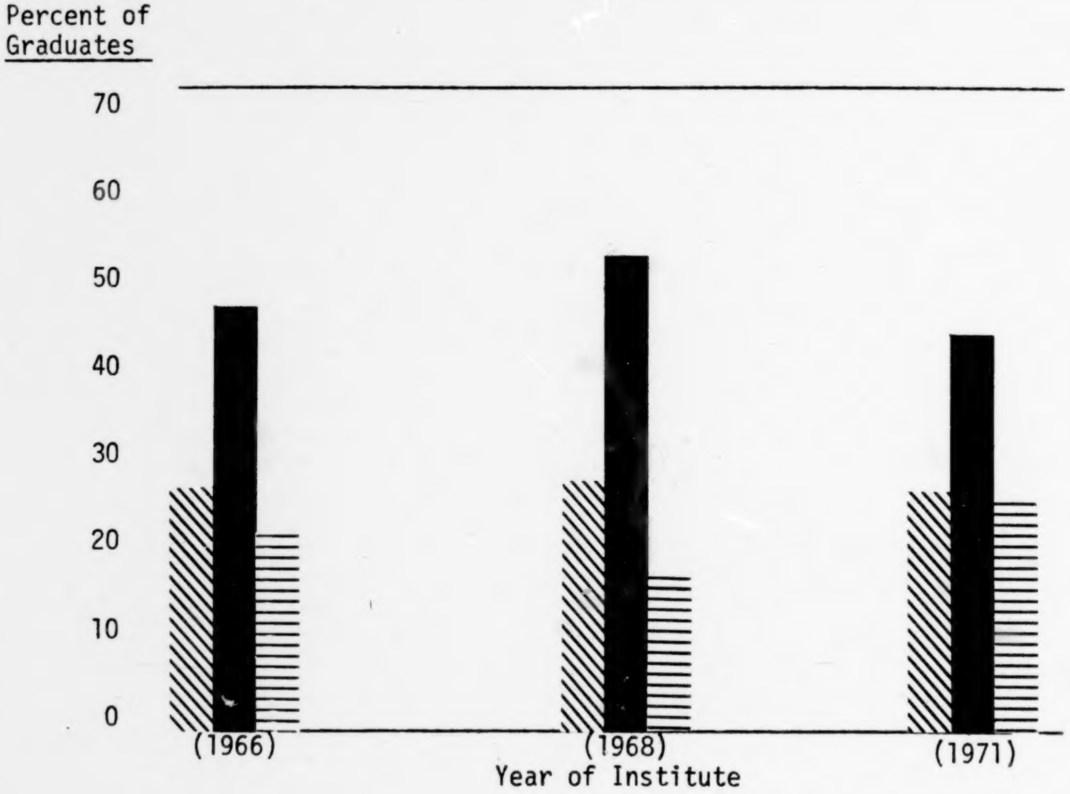
Nearly 40 percent of the population reported their present media assignment required '50%-or-more' time to perform required media responsibilities. Of this 40 percent, some 60 percent report they are presently devoting 100 percent of their time to media. Table A-9 (Appendix A) shows the distribution for the three years considered in this study. For the 1966 and 1968 graduates, the number of persons whose present work load is '50%-or-more' media-related is comparatively lower than for the 1971 graduate group.

Description of Present Media Responsibilities. Graduates were asked to describe their present media responsibilities. Two descriptions (or definitions of educational technology) were supplied: (1) "the distribution of hardware and software to users;" and (2) "working directly with teachers, students, and administrators in designing, implementing and evaluating the total process of learning and teaching in terms of specific behaviors" (A similar definition is used by the Commission on Instructional Technology). A third alternative invited the respondent to supply his or her own definition. Some 27.9 percent of all graduates responded to the first description. The response was similar for the 1966 and 1968 graduates, but in 1971 the use of this definition was reduced by half. Of the total graduate group, 48.8 percent subscribed to the second definition. The responses of graduates from 1966 and 1968 institutes were similar to each other, but in 1971 a greater percentage of participants selected the second definition as most representative of their media responsibilities. Figure 15 shows the respondents distribution for these two descriptions. (Also, see Table A-16, Appendix A).

The write-in description of media responsibilities from 1971 respondents indicates there is a decrease in the number of graduates performing service-type operations, while instructional development is receiving greater attention than at any previous time.

Figure 15

Description of Graduates' Post Institute Media Responsibilities



▨ Definition #1: Distribution of hardware and software to users.

■ Definition #2: "Working directly with teachers, students and administrators in designing, implementing, and evaluating the total process of learning and teaching in terms of specific behaviors."

☰ Other (a write-in response): Descriptions fell into four categories:
1) combinations of the two definitions provided,
2) solely administrative,
3) principally utilization, or
4) instructional development.

Pre and Post Institute Job Responsibility Levels. The graduates were asked to indicate, by percentage breakdown, the level of their pre and post institute media job responsibilities. In the questionnaire, responsibility levels were defined according to the Hamreus breakdown: directive-administrative, professional, artistic-technical, clerical-manual, and 'other'. (See pages 17 and 18 of this report, or Question 9 of the Participants Questionnaire, Appendix C, for a definition of terms.)

Pre Institute, the percentage of participant job responsibilities which were directive-administrative and those of a professional nature were approximately equal. Post Institute there is an increase in directive-administrative level responsibilities of 7.8 percent and a decrease in professional responsibilities of 5.9 percent (See Figure 16). This suggests a substantial change in job responsibilities came about as a result of the institute experience.

Figure 17 depicts the difference in responsibility levels for the '50%-or-more' and 'less-than-50%'dichotomy at the directive-administrative and professional levels. Here the shift toward directive-administrative activities is much greater for the group whose media responsibilities consume '50%-or-more' of time than for those spending 'less-than-50%' of time in media (a 17.2 percent increase as opposed to a 1.6 percent increase).

An unexpected finding (see Figure 16) was the high response in the 'other' category--an obvious lack of sensitivity in the design of the instrument. Response to the 'other' category was much greater for the 'less-than-50%' group (see Tables A-11 and A-12, Appendix A), indicating that alternative responsibilities such as teaching were not adequately defined in the instrument.

Figure 16

Pre and Post Institute Job Responsibility Levels
for Institute Participant/Graduates

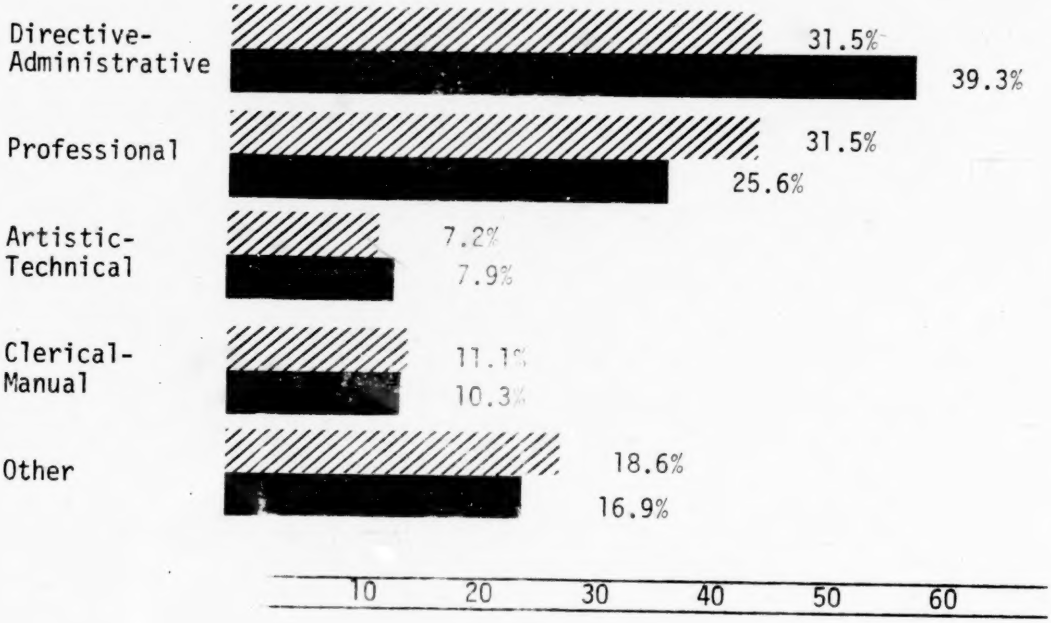
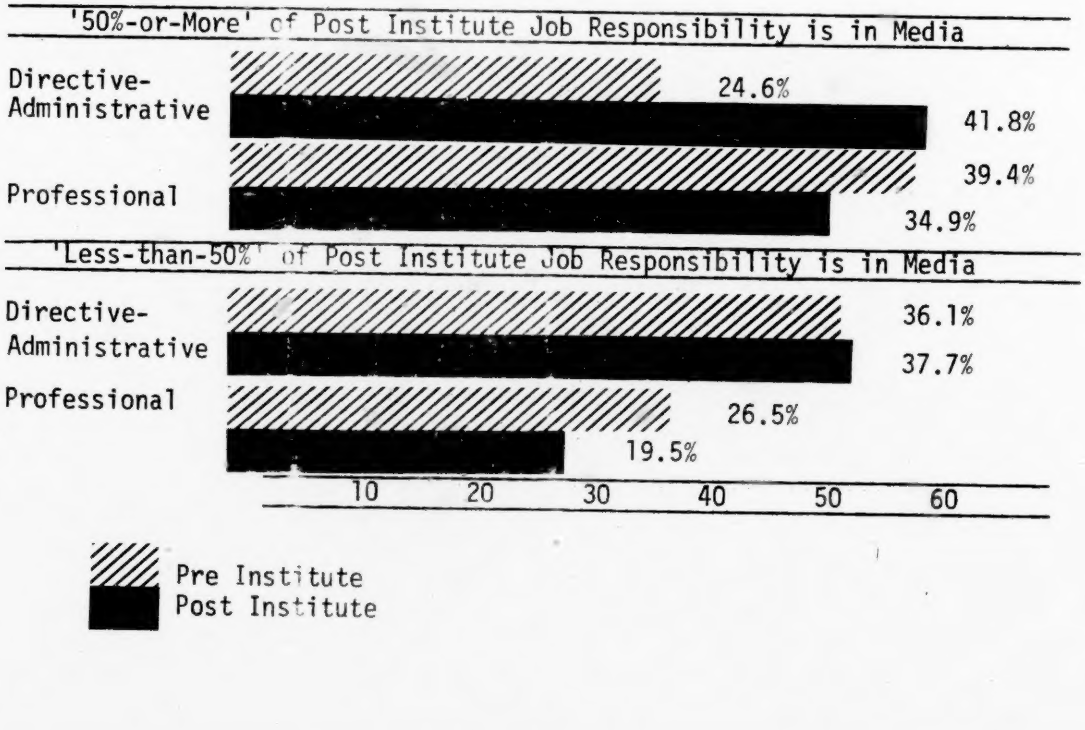


Figure 17

Pre and Post Institute Job Responsibility Levels
(Breakdown by Percent of Time in Media)



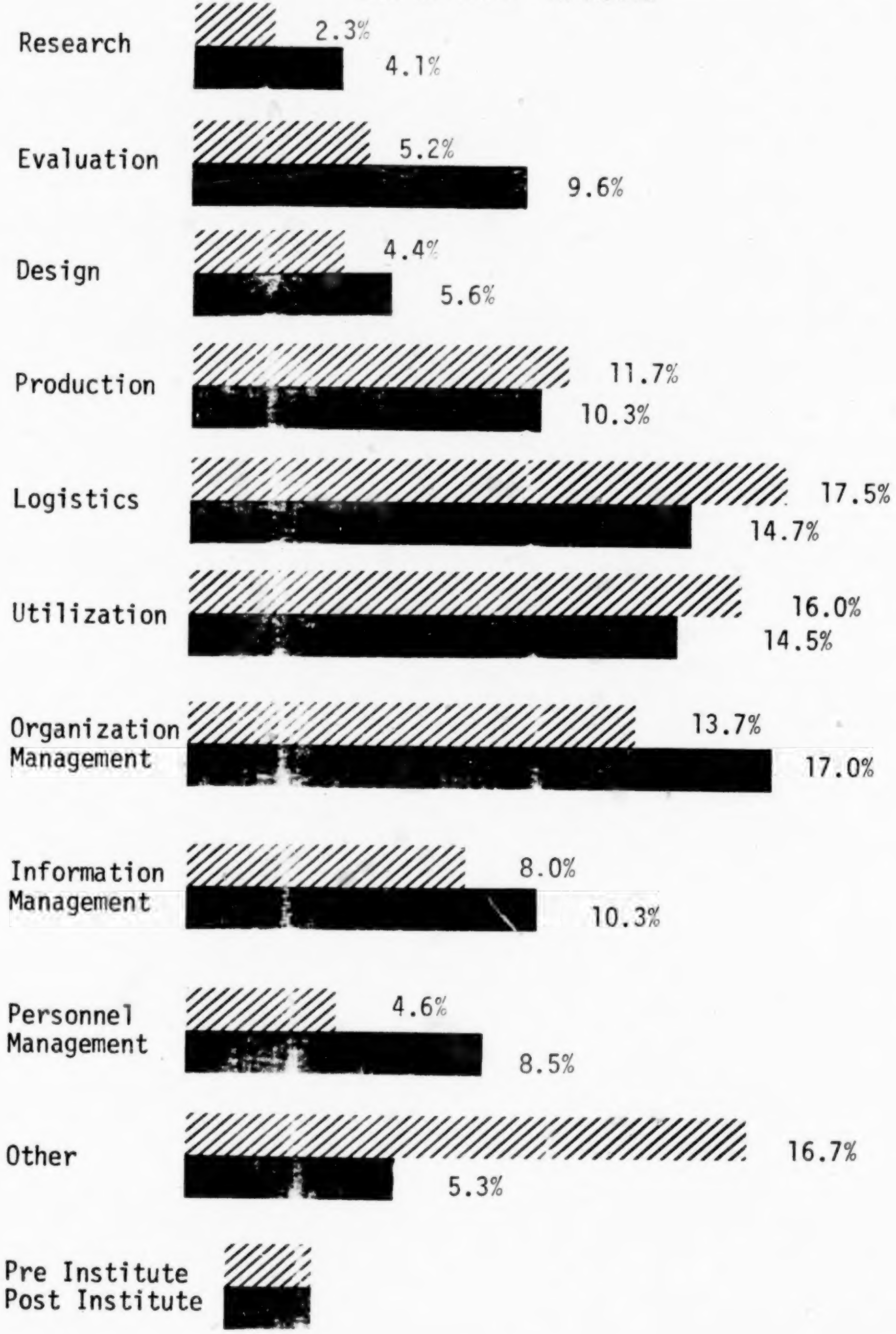
Job Functions: Pre and Post Institute. Graduates were asked to check a percentage of on-the-job time spent in various media functions (pre and post institute). Comparing post-institute 'functions' to pre-institute functions, there is a significant increase in responsibility for *design* (from 3.3 percent pre institute to 4.4 percent post institute), *evaluation* (from 5.6 percent pre institute to 9.0 percent post institute), and *management* (from 26.6 percent pre institute to 31.2 percent post institute) for the average participant.

For respondents whose work load is '50%-or-more' media-related (See Figure 18), there is a significant increase in *research* (from 2.3 percent pre institute to 4.1 percent post institute). Those whose work load reflects a major responsibility in media-related activities are now almost twice as involved in *evaluation* (4.4 percent pre institute, 9.6 percent post institute), and spend about 25 percent more time in *design* (4.4 percent pre institute, 5.6 percent post institute). There is slightly less involvement in *production* (11.7 percent pre institute, 10.3 percent post institute).

The *other* category is the largest category for the 'less-than-50%' graduate group. This reinforces the earlier observation that one or more major alternatives were deficient in the testing instrument. (For a comprehensive display of this data, see Tables A-13, A-14 and A-15, Appendix A.)

Figure 18

Percentage of Time Devoted to Specific Media Functions by Graduates Whose Post Institute Job Responsibility is '50%-or-More' in Media

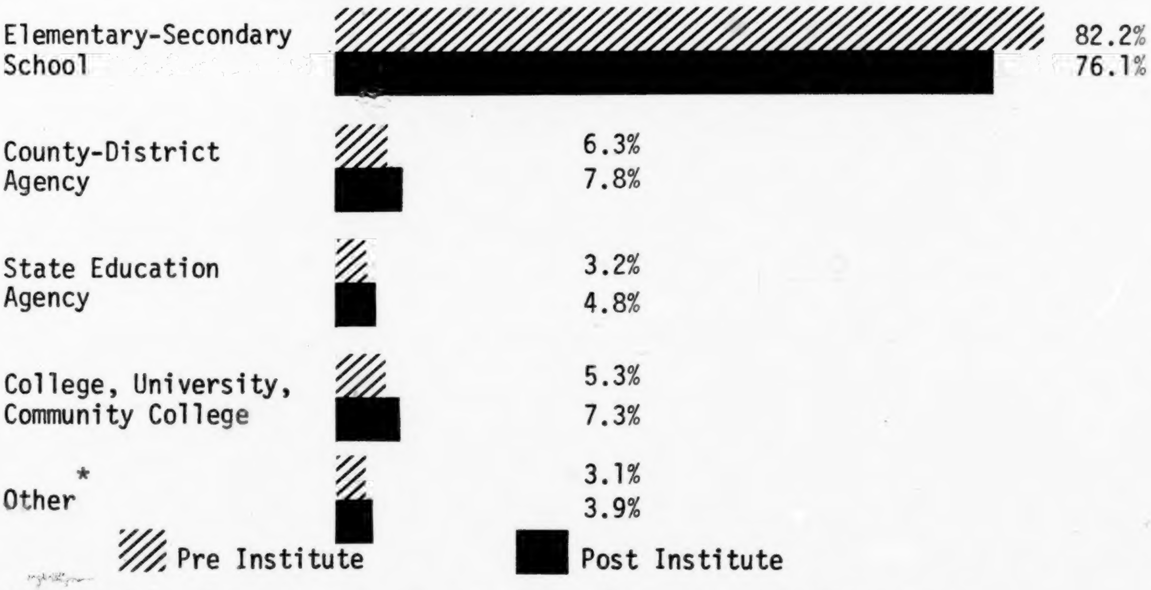


Job Mobility of Institute Participants. Continuation in the same job since the institute was reported by 65.7 percent of the graduates responding. Some 9 percent of the respondents reported they had received new employment opportunities as a result of institute training, while 23.8 percent responded to the 'other'category. Responses in the 'other' category usually represented promotions to higher administrative levels (e.g., to principal, supervisor, assistant superintendent, and superintendent). (See Table A-23, Appendix A, for complete response data).

The institute experience may have accelerated a change in professional affiliation for some participants. Pre institute, 82.2 percent of participants were affiliated at the elementary-secondary school level, decreasing post institute to 76.1 percent at time of the survey. The 6.1 percent of the participants who did not stay in elementary and secondary schools accepted jobs in district, county and state agencies, and in higher education. The trends are shown in Figure 19.

Figure 19

Professional Affiliation



*Included in this category are business, industry, the military and government

There is a very interesting contrast in post-institute affiliation between the group spending '50%-or-more' of time in media and the 'less-than-50%' group: Of those now spending 'less-than-50%' of time in media, 75.4 percent came to the institute from elementary-secondary 46/ schools; after the institute the elementary-secondary school level *gained* 6.3 percent of the same group's graduates making a total of 81.7 percent for the 'less-than-50%' group at the elementary-secondary school level. Of those now spending '50%-or-more' of time in media, 86.7 percent came to the institute from elementary-secondary schools; post institute, only 67.4 percent of that population group are still affiliated at the elementary-secondary school level, a loss of 19.3 percent. (See Figure 20; and for greater detail, see Tables A-17 and A-25, Appendix A).

How can this spectacular (19.3 percent) drop be explained? Where did the graduates go?

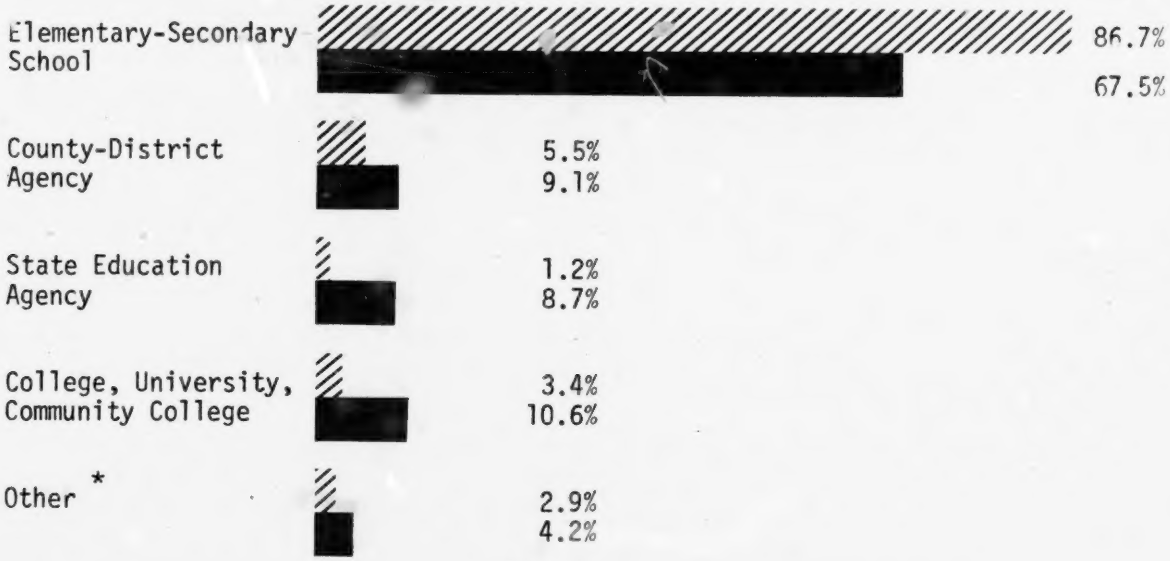
The '50%-or-more' people increased at the county-district level (3.6 percent post institute increase), at the state education agencies (7.5 percent), at the higher education level (7.2 percent), and in the 'other' category (1.3 percent).

The most obvious explanation is that jobs with a major responsibility in media ('50%-or-more') did not increase at the elementary-secondary school level in proportion to the number of persons trained. Many of these graduates sought or were offered new opportunities as a result of institute training. In a few institutes the graduates noted in write-in comments that the school-level media program was even being phased-out. While at first glance it looks as though elementary-secondary education is not being responsive to the use of educational media: the

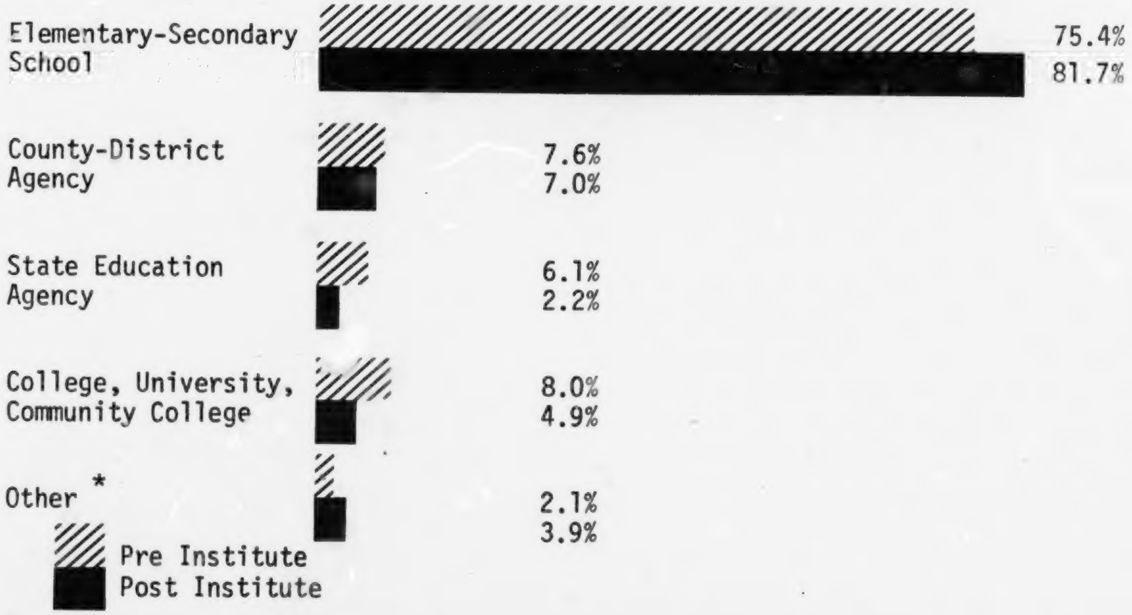
Figure 20

Professional Affiliation
(Breakdown by Percent of Responsibility in Media)

'50%-or-More' of Post Institute Job Responsibility is in Media



'Less-than-50%' of Post Institute Job Responsibility is in Media



*Included in this category are business, industry, the military and government.

reverse is actually true. The majority of institute participants did return to the public schools, and many rose to administrative level jobs. Also, graduates taking district and state level positions have direct impact upon educational practice in elementary and secondary schools, perhaps more far-reaching impact than if they had remained in their individual school.

The 'less-than-50%'**people**, previously affiliated at the county, state and higher education levels, migrated away: at the county-district level the 'less-than-50%' graduates decreased 0.6 percent; at the state education agency level, 3.9 percent decrease; at the higher education level, 3.1 percent decrease; and in the 'other' category, a 1.8 percent decrease. The only increase was at the elementary-secondary school level!

A look at 'write-in' comments from 'less-than-50%' graduates shows a range of incentives brought graduates into elementary-secondary school positions: Termination of federal projects at county-district and state levels, post-institute differences in philosophy of graduate and employer, and the following reason summed up by a former county-district supervisor who returned to a high school as an assistant principal: "I feel the real challenge is in the schools rather than in the central office."

Analysis of the change in employment patterns related to percentage of media responsibilities makes one thing abundantly clear. RELATIVELY FEW OF THE INSTITUTE GRADUATES WORKING AT THE ELEMENTARY AND SECONDARY SCHOOL LEVEL HAVE MEDIA RESPONSIBILITIES CONSUMING '50%-OR-MORE' of WORK LOAD. POSITIONS WITH A HIGH LEVEL OF MEDIA RESPONSIBILITY ARE MORE LIKELY TO BE FOUND IN DISTRICT, COUNTY, AND STATE AGENCIES, OR IN COLLEGES AND

UNIVERSITIES. THUS, ONE RESULT OF THE MEDIA INSTITUTES WAS TO CAUSE A SHIFT OF SOME OF THE MORE HIGHLY TRAINED MEDIA PERSONNEL FROM THE SCHOOL BUILDING LEVEL TO OUTSIDE OFFICES. EXCEPT FOR LIBRARY-MEDIA PERSONNEL, THE SCHOOL SYSTEM DID NOT PROVIDE SUFFICIENT OR ADEQUATE JOBS TO RETAIN AND FULLY UTILIZE ALL OF THE MEDIA PERSONNEL TRAINED BY THE INSTITUTES. THE REVERSE APPEARS TO BE TRUE OF COUNTY, DISTRICT, AND STATE LEVEL POSITIONS, INCLUDING COLLEGE INSTRUCTION. THE INSTITUTES PROVIDED A SOURCE OF TRAINED MEDIA MANPOWER WITH EXPERIENCE IN PUBLIC SCHOOL TEACHING.

Overall, the mobility of educational media institute graduates is limited to about one third of the population studied. It appears, graduates who presently devote '50%-or-more' time to media-related activities are afforded twice as many new opportunities as a result of the institute than those graduates who now devote 'less-than-50%' of time to media. (For a more precise look at pre and post institute mobility data, see Tables A-17 and A-25, Appendix A).

Institute Activities, Content, and Facilities

Content Considered Most Important. Institute graduates were asked to identify activities and content areas they considered 'most' and 'least' related to achieving institute objectives. *Graphics production, instructional development, media operations and communication theory* were, in that order, ranked by the participants as the four most important content areas. Tables A-27 and A-28 (Appendix A) give a rank ordering of content areas considered most relevant by participants. In the early institutes graphics production and media operations were dominant. However, a major trend toward instructional development was apparent by 1968 which continued to manifest itself through the 1971 institutes. In the same period, graphics production and media operations began to fade in importance.

50/ Content Considered Least Imporant. Of the content areas considered relevant to institute objectives, computer use in education was ranked least important. Library training and retrieval systems were also reported to be of little relevance to institute objectives. Table A-29, Appendix A, gives a rank ordering of responses.

Most Important Activities. Those activities considered of greatest importance were ranked as follows:

1) production labs,
2) scheduled classroom activities,
3) guest lecturers,
4) field experiences,
5) simulation activities, and
6) professional activities.

It is interesting to note, 1966 and 1968 participant responses were consistent, but a change in priority of activities shows up for 1971 participants: they ranked guest lecturers first, self-instructional programs second, and field experiences third. Table A-26, Appendix A, shows the rank-ordering of activities for each year's graduates.

Content Areas in Relation to Present Job. Graduates were asked which content areas were most critical to performance of their current job responsibilities. The diversity of competencies necessary to perform efficiently in the field of instructional technology is evident: some 33 descriptors were listed by graduates. Production skills ranked highest, instructional development second. Media utilization techniques are still the primary concern of many, while skills in administration of media programs were considered high priority. A complete listing of all 33 subject descriptors is found in Table A-33, Appendix A.

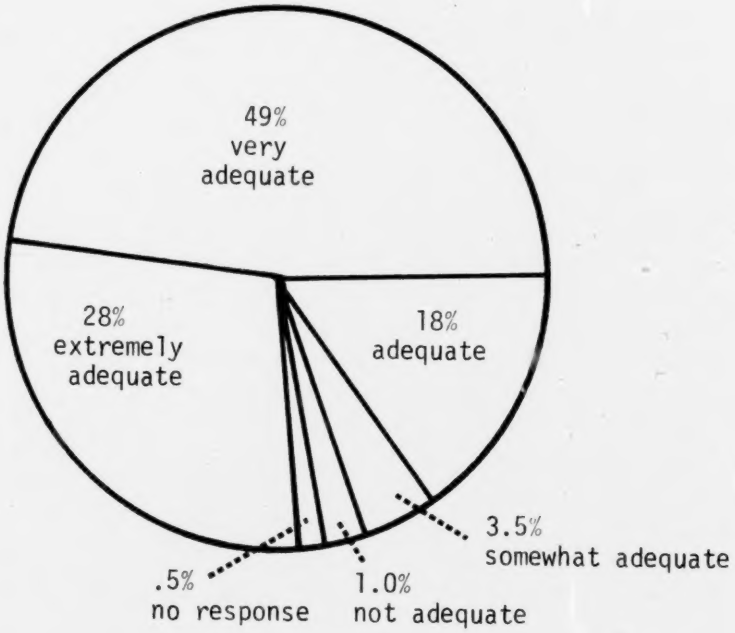
Additional Training Desired. When graduates were asked to provide areas educational media institutes should address in the immediate future, the trend shifts (see Table 34, Appendix A). From some 33 subject-matter descriptors, *instructional development* ranked first among graduates. *Production* and *television* ranked second and third, respectively. As might be expected, many graduates are influenced by their own current needs and deficits in background (cf Tables A-33 and A-34.).

Adequacy of Training/Facilities. The response of participants to the adequacy of training, facilities and equipment should be very gratifying for institute directors and host institutions: an overwhelming 78 percent of the participants reported their media training was *very adequate* or *extremely adequate* (See Figure 21). Some 69 percent reported the facilities and equipment were either *very adequate* or *extremely adequate*.

Participants who presently spend '50%-or-more' time in media-related activities were more critical of the facilities and equipment than those spending 'less-than-50%'. Some 65 percent of those spending '50%-or-more' time in media rated the facilities and equipment *very adequate* to *extremely adequate*, while 72 percent of those whose media responsibilities consume 'less-than-50%' of their work load indicated the facilities and equipment were *very adequate* to *extremely adequate*. (See Tables A-30 and A-31, Appendix A, for basic data from which these observations are drawn.)

Figure 21

Adequacy of Media Institute Training
in Relation to Institute Training Objectives



Value of Training as Perceived by Graduates

Institute participants indicate media institutes (32.5 percent), graduate schools (31.2 percent) and on-the-job training (22.0 percent) were most beneficial in preparation for their present jobs (See Figure 22). For institute graduates now devoting '50%-or-more' time to media-related activities (40 percent), 45.5 percent credited media institutes with providing the most beneficial training for their present media assignment. Figure 22 shows graduate responses for all categories related to this item (also see Table A-32, Appendix A).

Participant comments were numerous and very positive in regard to the media training received through educational media institutes. Very few negative responses were received. Table A-35, Appendix A, excerpts some typical responses, both positive and negative.

Figure 22

Most Beneficial Education Experience
in Preparation for Present Job

	ALL Graduates	Graduates now spending '50%-or-More' of Time in Media
Media Institute	32.5%	45.5%
Graduate School	31.2%	27.6%
On-the-Job Training	22.0%	23.4%
Four-Year College	12.2%	3.4%
Community College	0.2%	--
Other	1.7%	--

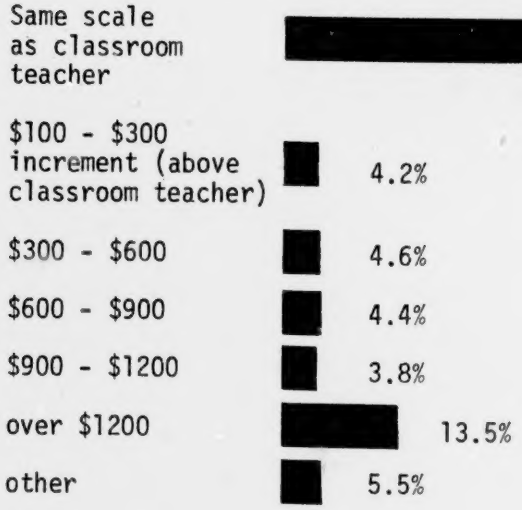
Economic Value of Media Training (to the Graduate)

It would be expected the added competencies of many graduates, as a result of media institute training, would in turn increase the remuneration from their work. Approximately one third of the graduates reported they now receive additional remuneration, above the classroom teacher scale, for their media responsibilities. At present, 21.7 percent receive additional remuneration exceeding $600, and over half of these--13.5 percent--receive additional remuneration of $1200 or more. For those spending '50%-or-more' of time in media-related activities, 32.7 percent received an increment of $600 or more. Of these two thirds or 21.3 percent receive an increment exceeding $1200. By comparision, only 13.1 percent of the group spending 'less-than-50%' in media receive an increment of $600 or more, and only 7.4 percent of these currently receive more than an additional $1200.

Gains for each of the categories are shown in Figure 23. Table A-22, Appendix A, shows the monetary gains reported for those with media responsibility of '50%-or-more' and 'less-than-50%'.

Figure 23

Graduates' Post Institute Salary Scale



Other Outcomes and Products of the Institutes

Multiplier Effect: Workshops or Inservice Programs. The 1966 graduate group reported the highest percentage of graduates (when compared with the 1968 and 1971 groups) having conducted workshops: 83.4 percent of the 1966 respondents. Subsequent years reflect a slight percentage decrease in percent of graduates conducting workshops or inservice programs. For 1971 this can be explained as a lack of elapsed time since institute graduation; but 1968 would tend to reflect cutbacks in federal funding with their consequent reduction of institutional support for such activities. As would be expected, the professional who devotes '50%-or-more' of time to media responsibilities conducts more inservice programs or workshops than persons devoting 'less-than-50%' of time to media. (See Table A-18, Appendix A for more detailed data.)

The majority of inservice programs or workshops were conducted for elementary and secondary classroom teachers (76.1 percent of the total number of institutes conducted). However, inservice programs were conducted at all professional levels (See Table A-19, Appendix A). Graduates spending '50%-or-more' time in media-related activities conducted an appreciably higher number of workshops, per person, across all professional workshop audience levels, than did the 'less-than-50%' graduates. (See Table A-20, Appendix A.)

The number of inservice programs conducted per graduate varies greatly: a little better than half (53 percent) of the graduates responding indicated they have conducted one to five workshops.

Based on the data received, the educational media institute participants returned to their school systems to conduct workshops and inservice programs for literally thousands of colleagues, sharing with them many newly acquired skills and techniques in media. In the 1970 and 1971 institute years, an additional program--the Instructional Development Institutes (IDI's)--formalized the multiplier aspect by providing a specialized, packaged program of materials for concentrated inservice training workshops. These were often staffed at the local level by participants or graduates of various media institutes.

Multiplier Effect: Key Positions Occupied by Institute Graduates. Many, if not most, institute participants were elevated jobwise as a result of the institute experience. Most assumed higher administrative roles (page 41); some moved into district, county, and state media
56/ positions (pages 45-49); and some took positions in colleges and universities (page 45).

Institute graduates were asked to list a job title for their present (post institute) work assignment as well as for their work assignment immediately prior to the institute. These job titles varied greatly, as would be expected, and job descriptions could not be adequately determined from the titles alone. However, a rise in number of new job titles--such as Director/Coordinator of Instructional Resources--was evident.

Of interest is the shift in numbers from pre-institute job titles to post-institute job titles. These substantiate the data presented earlier that many participants moved into directive-administrative level positions. Reporting of titles representing technical-level skills was reduced as much as two-thirds, post institute. The number of graduates reporting the title 'librarian' was reduced by almost one half post institute, while the number of such titles as Director of Instructional Materials Center or Learning Resource Center increased significantly. (See Tables A-7 and A-24, Appendix A, for specific response data on job titles).

IV. DIRECTORS SURVEY: FINDINGS AND INTERPRETATIONS

The directors survey sought data relative to the type of training offered in Educational Media Institutes from 1965 through 1971. Institutes were analyzed in terms of content and methods utilized for accomplishing institute objectives. The directors provided information on the training emphasis and suggested content areas and direction institutes should consider to support current needs.

Educational media institutes had considerable impact on their host institutions: They provided growth impetus for existing programs, creation of new programs, and increased commitment for facilities, faculty, and equipment. This in turn led to increased enrollment in the academic educational media/technology programs.

The directors' questionnaire and accompanying letter are presented in this report as Appendix D.

Institute Characteristics

Length of Training. The length of training for the educational media institutes considered in this survey varied from two weeks to a period of one or more academic years. For the purpose of this study, training involving less than three months was categorized a 'short-term' and training requiring four months or more was categorized as 'long-term'. There were 142 short-term institutes and 31 long-term institutes. Of the 69 directors responding, 15 represented long-term institutes and 54 represented short-term institutes. Distribution of short and long-term institutes was brought about by a shift in U.S. Office of Education policy: after funding from the National Defense Education Act ceased and funding from the Education Professions Development Act began, there was a shift from short-term summer institutes to full-year (long-term) institutes (See Table B-1, Appendix B).

58/ The distribution of directors responding to this survey is tabulated for each year (1965-71) in Tables B-1 and B-2, Appendix B. These tables also indicate the duration of the training as 'short-term' or 'long-term'.

Economic Support. The directors of the 69 educational media institutes represented in this survey reported federal support totaling $4,044,235 for institutes conducted from 1965-71. This amount averages $58,612 per institute. Under NDEA, Title XI and EPDA, Part D, the number of dollars decreased each succeeding year while the number of participants increased. This can be seen in Table B-3, Appendix B. It should be noted that later years included funds for the Instructional Development Institute program which disseminated the products of the Special Media Institutes, using a large number of short-term workshops.

Institutional support was small compared to federal funding of the institute programs and usually took the form of operating expenses or waiver of tuition. Only one director reported his institution financed a later institute without federal assistance.

Participant Pre-Institute Affiliation. Of the directors responding, 82.4 percent of their institute participants came from the elementary-secondary school level, while the remaining 17 percent came from state education agencies, county-district agencies, community colleges, universities, business, industry, military and government. These percentages do not differ significantly from the participants' responses to the item in their questionnaire regarding pre-institute professional affiliation (See Figure 24). The distribution reported by graduates and directors for each year can be seen in Tables A-25 (Appendix A) and B-4 (Appendix B).

Figure 24

Pre-Institute Professional Affiliation of Participants
(comparision of graduates'and directors'responses)

	Graduates' Responses	Directors' Responses
Elementary-Secondary Schools	82.2%	82.4%
County-District Agencies	6.3%	7.0%
State Education Agencies	3.2%	2.2%
Colleges and Universities	4.1%	6.4%
Community College	.4%	1.2%
Business and Industry	.2%	.3%
Military	--	--
Government	.3%	.2%
Other	2.6%	.6%

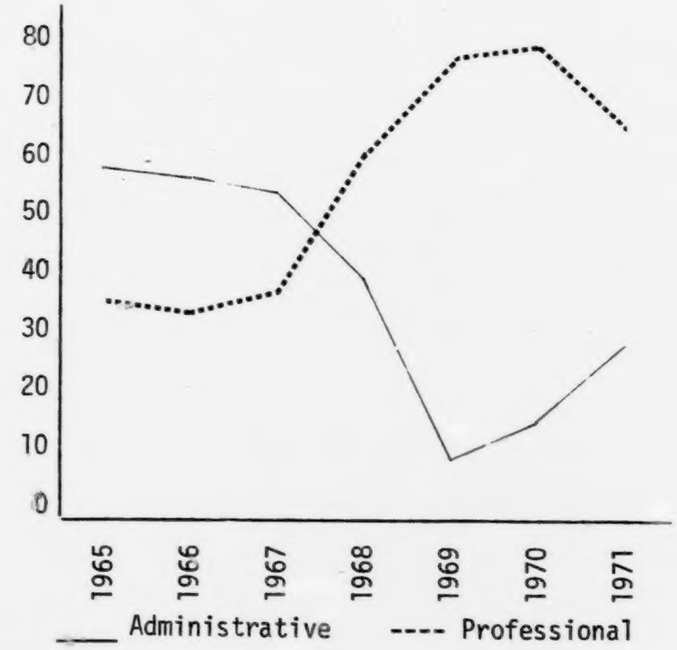
NB: Differences are due to incomplete population sample and limited response to surveys.

Responsibility Levels for which Institute Training was Directed. As reported by the total group of directors, institutes from 1965 through 1971 were concerned mainly with developing individuals capable of performing at the professional and directive-administrative levels (see definitions on pages 17 and 18). The institute directors reported 50.7 percent of the training efforts emphasized training at the professional level and 42.2 percent at the directive-administrative level. (See Table B-6, Appendix B.)

Figure 25 shows the changing pattern in training participants for directive-administrative and professional competencies. It would appear that through 1967, basic skills were being developed to manage the new hardware and software many school systems had acquired with federal funds. From 1967 through 1970, training for developing and utilizing instructional systems appears to be the major thrust. A new trend appeared in 1971: a revived emphasis on training for directive-administrative competencies. This may in part have been a reaction to the need for higher-level administrative skills at the local school level to support the outgrowth of instructional development institute multipliers.

Figure 25

Institute Time Devoted to Training for 'Directive-Administrative'
and 'Professional'
Responsibility Levels



Emphasis on professional skills was very high from 1968 through 1971. There is disparity between this training data and the increased directive-administrative assignments reported by participants (cf. Table A-10 Appendix A and Table B-6, Appendix B).

Functional Competencies for which Training was Directed. The /61 directors reported institute training for developing functional competencies in media constituted the following percentage of the total institute curriculum: *production*, 22.9 percent; *utilization*, 19.1 percent; *design*, 14.1 percent; and *evaluation*, 11.5 percent. *Production* and *utilization* received less emphasis from 1968 through 1971, while *design* was emphasized more.

The relative importance of *evaluation* fluctuated, but beginning in 1968 it received increasing emphasis. The training trend for functional media areas indicates a departure from traditional basic media skills to competencies essential to the more comprehensive instructional development process. (See Table B-5, Appendix B, which includes data reported on media functional competencies, including some not mentioned in the above paragraph.)

Instructional Format

Content. The directors ranked content areas which *best* characterize the main thrust of educational media institutes: (1) *instructional development*, (2) *media operation*, (3) *communications theory*, and (4) *graphics production* (See Table B-9, Appendix B). Those content areas least characteristic of the institute training included *computers*, *library training*, *retrieval systems* and *programed instruction* (See Table B-10, Appendix B).

In 1968, *instructional development* came to the fore as the most important content area, and held first rank through the remaining years surveyed. Other content shifts include a decrease in emphasis of *graphics production* and an increase in the importance of *communications*
62/ *theory*.

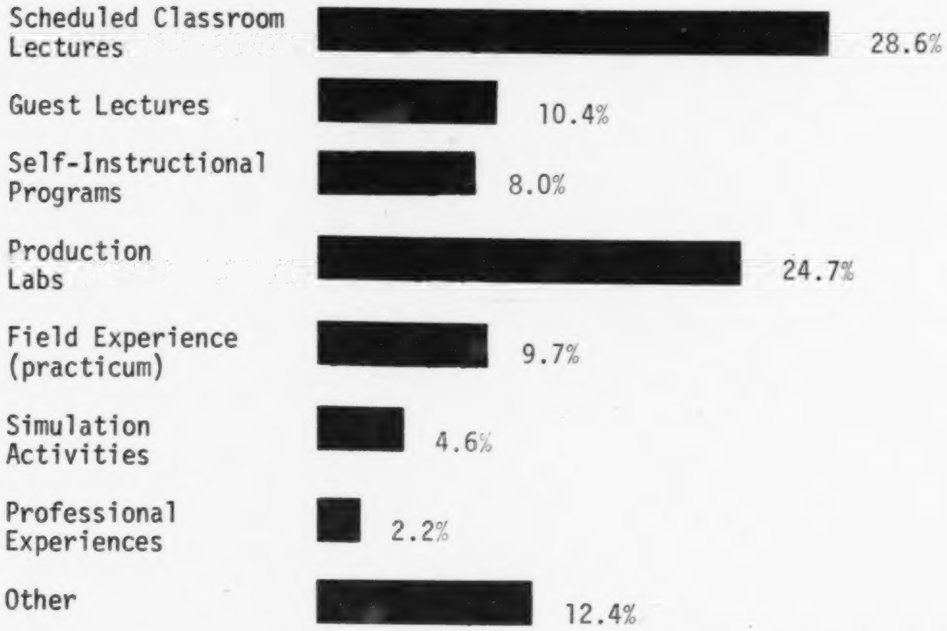
The year 1971 clearly marks a change in institute format and clientele. The educational media institutes were principally year-long, and terminal rewards included the completion of a degree, an increment in salary, or a new position. The year-long institutes de-emphasized the thrust for training in basic production and utilization techniques, interweaving such competencies into a more comprehensive program.

Activities. The format most often subscribed to for accomplishing institute objectives included 28.6 percent of institute training presented in scheduled classroom activities, 10.4 percent in guest lectures, 9.7 percent in field experiences or practicum, and 8.0 percent in self-instructional programs. Those activities viewed as having little impact included simulation experiences and professional experiences such as meetings and conventions.

Excluding production labs and scheduled classroom activities, no activity emerged as a dominant training mode. The 1971 directors indicated a shift to greater emphasis on field experiences in that year's institutes. The mean percentage of responses for each year can be seen in Table B-7, Appendix B.

Figure 26

Time Spent in Various Institute Activities



There is a small difference between the mean percentage of time spent in various activities (Figure 26) and the way in which directors rank-ordered the importance of this activity (Figure 27). To accomplish their institute objectives, directors ranked the importance of various activities as follows: (1) production labs, (2) scheduled classroom activities, (3) guest lectures, (4) field experiences, (5) self-instructional programs, (6) simulation, and (7) professional activities.

A comparision of the rank ordering of institute graduates with institute directors shows them to be almost identical (Figure 27).

Figure 27

Rank Order of Activities Considered Most Valuable in Achieving Institute Objectives

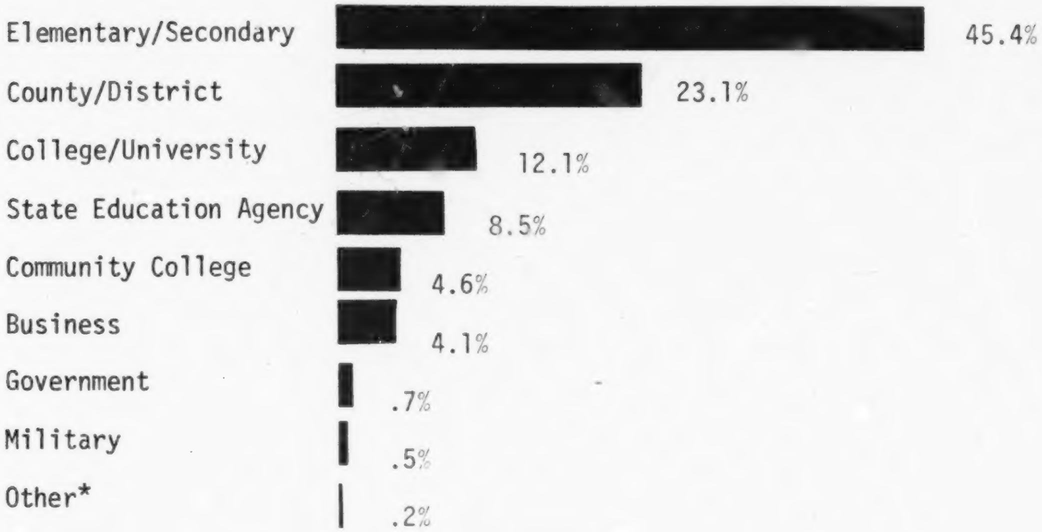
	Directors' Response	Graduates' Response
Scheduled Classroom Lectures	2	2
Guest Lectures	3	3
Self-Instructional Programs	5	5
Production Labs	1	1
Field Experience (practicum)	4	4
Simulation Activities	6	6
Professional Experiences	--	7
Other	7	--

Placement of Graduates

Employment Trends at the Time of the Institutes. Over the institute years surveyed, directors reported inquires for new personnel were mainly from the elementary-secondary school level (23.2 percent of all contacts) and county-district agencies (12.1 percent). State education agencies appeared equal with community colleges in employment opportunities, and universities afforded media specialists twice as many opportunities for employment as either state education agencies or community colleges. Business, industry, government and the military made very few contacts with institute directors regarding prospective employees. A mean percent average of the directors' response to this item for 1965-71 inclusive is shown in Figure 28.

Figure 28

Relative Percentage of Prospective Employment Inquiries
Made at Time of Institute



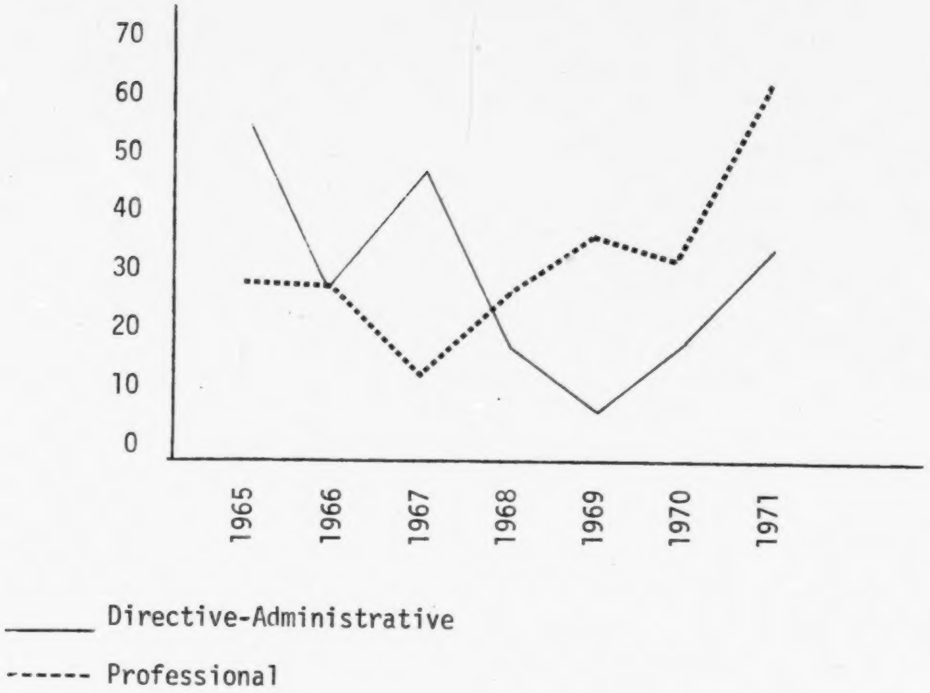
**This category reflects those not responding to the questionnaire item due to a lack of records.*

Examination of Figure 28 shows another possible reason for many graduates moving from their elementary-secondary school positions. The available new positions were primarily in the other areas listed. Of the employment inquiries received, 31 percent of the directors reported inquiries were for directive-administrative level personnel and 28 percent for the professional level. There were few inquiries for artistic-technical and clerical-manual level personnel.

Directors of institutes for the years 1967, 1968 and 1969 indicated a decrease in employment contacts for persons at the directive-administrative level and an increase in positions for persons with professional competencies. It appears the management of newly acquired hardware and software was under control while new competencies were needed to assist the teacher in integrating new materials into the curriculum. (See Tables B-13 and B-14, Appendix B).

Figure 29

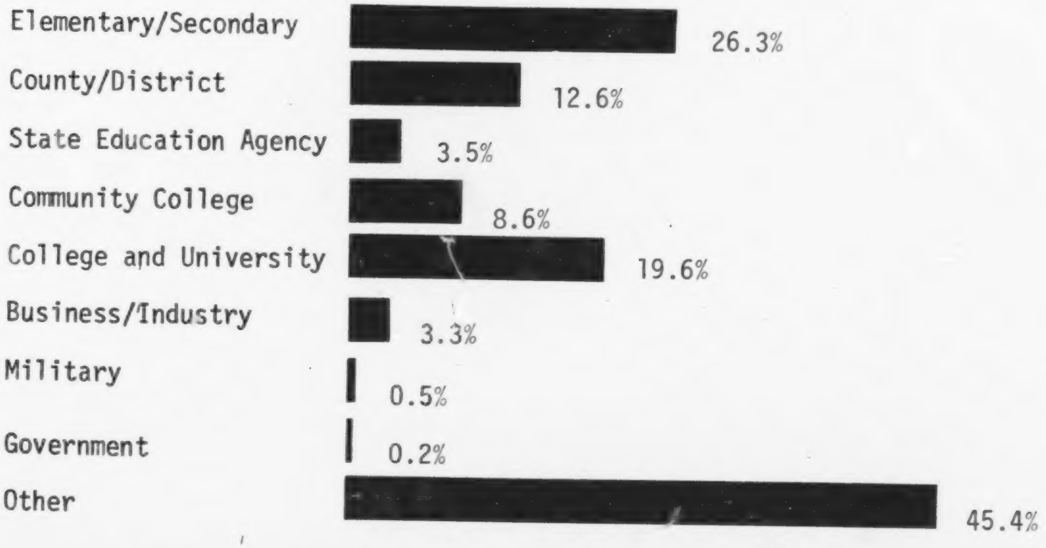
Employment Contacts at Time of Institute Relative to Responsibility Levels



Present Employment Trends. As shown in Figure 30, present employment contacts (School Year 1972-73) reveal opportunities for media

Figure 30

Present (School Year 1972-73) Employment Contacts for Media Specialists



specialists mainly at the elementary-secondary school level (26 percent of employment contacts received by directors) and the county-district level (13 percent). One director said of employment opportunities, "The institute had a marked effect upon the employment of media specialists in the surrounding region of the state." (See Table B-13, Appendix B).

When compared with employment contacts at the time of each institute (Table B-13, Appendix B) colleges and universities provide the greatest single increase in present opportunities (School Year 1972-73): 19.7 percent as compared to the previous mean average for that category of 8.5 percent (see Table B-15, Appendix B).

The community college/technical institute category also showed a marked gain: 8.7 percent of contacts as compared with 4.1 percent.

A disparity exists between job inquiries, as reported by institute directors, and the actual professional affiliation of institute graduates (cf Table A-17 and Table B-15). The directors reported 26.3 percent of the job inquiries were for positions at the elementary-secondary school level, while 76.1 percent of the graduates actually returned to positions at this level. This difference can be explained by the prior commitments of many graduates to return to their school systems after training.

At the higher education level (community college/technical institute/college/university), directors reported job inquiries of 28.4 percent while graduates returning or assuming new positions at these levels constituted only 7.3 percent of the total graduate population. This disparity is not surprising since these institutes were intended for ~~training~~ public school personnel at the building level. It does indicate the need for institutes to serve higher education. (cf Table A-17 and Table B-15).

68/ The present job opportunities for institute graduates are at the professional (37.8 percent) and directive-administrative (34.5 percent) responsibility levels. Comparing pre-institute and present (1972-73) contacts, employment opportunities show an increase of 9.4 percent at the professional level and 3.4 percent at the directive-administrative level (see Figure 31).

Figure 31

Comparison of Employment Opportunities at Two Responsibility Levels

	Time-of-Institute	Time-of-Survey	Difference
Directive-Administrative	31.1%	34.5%	+3.4%
Professional	28.4%	37.8%	+9.4%

Peripheral Effects of the Institute

Host Institution Response. As might be expected, the educational media institutes had long-term impact upon the hosting institutions as well as upon the graduates. Directors reported such changes as national recognition, additional space and equipment, increased enrollment in the institution's academic media programs, expansion of the formal academic program (e.g. new courses),increased staff, and increased budget. In many institutions the institute funds helped to initiate new media programs or strengthen those already in existence. Specific responses for this item can be seen in Table B-12, Appendix B.

Inter-Institutional Exchanges. To provide more meaningful experiences for participants, some 40 percent of the responding directors reported they exchanged instructional resources or ideas. The exchange of instructional materials was primarily the result of individual initiatives through institutes held for the directors of media institutes. Such exchanges included bibliographies, slide-tape programs, films, and print materials relevant to the institute objectives. (See Table B-17, Appendix B).

Participants' School Systems. Some form of commitment was made by many school systems to encourage participation in educational media institutes. According to the institute directors, 86.9 percent of the school systems responded to the institute experience: 55.3 percent of the institute graduates returned to school systems in which release time was provided for media activities, 9.7 percent received some monetary support during the institute, 16.2 percent returned to newly created media positions. Only 14.1 percent of the graduates returned to school systems which provided no new incentive to utilize their institute learnings. (See response data in Table B-11, Appendix B).

Current Training Needs

The Directors' Needs. The last few years have been marked by increasing acceptance of educational technology and continued research and development in hardware and software delivery systems. Directors were asked in which content areas they themselves would like additional information. The response showed an interest in additional training in some sixteen content areas. *Instructional development, research* *methodology*, and *evaluation* were the top three choices. Other content areas listed by directors can be seen in Table B-18, Appendix B.

Comparing the responses of institute directors with the responses of institute graduates relative to future training needs in the field, both groups indicate *instruction development* should be given high priority (cf Table B-19 and Table A-34). Other priorities reflect the difference between practitioner and academician: *Production* is the only content area to appear in both response tables. Graduates listed *television* and *media utilization* as third and fourth priorities, while the directors suggested *evaluation* and *systems approach* to be more significant needs.

The Needs of the Field. The responding directors report major training emphasis should now be placed on the training and development of competencies related to (1) instructional development, (2) systems approach to education, and (3) evaluation. Of these, instructional development was overwhelmingly subscribed to by the respondents. The list is quite diverse and except for an expressed need for greater emphasis in instructional development, no major trends are present. The range of content areas which the directors feel to be important in the development and education of a media specialist is evident from Table B-19, Appendix B.

General Comments

The directors were given open-ended space to make relevant comments regarding their institute. Responses were numerous and positive. Some directors have maintained contact with their institute graduates and report they (the graduates) continue to be highly supportive of the value of their institute training. The participants' questionnaire response strongly supports this position (See Table A-32, Appendix A).

Although positive comments were made relative to the success of all institutes, there were distinct differences in opinion with regard to procedures and format: One director felt year-long institutes were /71 the best way to solve the present problems (on which he did not elaborate), while another stated quite emphatically, "We have worn out the current mode of leadership training." He too did not elaborate his position.

Not surveyed here is the role and direction of the U.S. Office of Education and its project managers in helping institutes respond to field needs. The Hamreus study in 1970 indicated the need for more directive-administrative training--and this was implemented by the 1971 institutes. The U.S. Office of Education placed an increasing emphasis on evaluation beginning in the year 1969. It studied, and required project directors to consider evaluation using relevant areas of the Stake and Stufflebeam CIPP model (context, input, process & product), and other models. This is reflected in the 1971 institute programs.

The commonality of data and opinions between directors and participants shows that close and constant communication occurred between directors and participants. The responsiveness to U.S. Office of Education direction reflects the adequacy of the national planning and monitoring procedures. The employment data shows the demand of the field for the people products of these institutes, and attests to their effectiveness. The ultimate payoff is the large number of trained media personnel supporting the present growth and development of educational technology, not only in the public schools, but in all areas of education.

V. SUMMARY AND CONCLUSIONS

The media institutes were initiated to provide the necessary trained manpower to support the rapid growth of educational technology. This growth came about for three reasons: (1) the advent of new educational media such as television, language labs, and programed instruction, (2) the stimulation of federal support for research and development of innovative educational programs, and (3) the need for improved methods of instruction to meet increasing societal demands on the educational system.

A deficit in the supply of trained media specialists existed in the 'sixties', with five universities supplying the majority of personnel to the field. Media institutes were set up to alleviate the deficit: the schools, the participants, and the field of educational media/technology benefited. Specific advantages can be categorized as follows:

I. Benefits to the public school system

  A. Creation of sufficient manpower to support present needs and future expansion.

  B. Creation of specialized manpower for leadership, research, and other designated functions.

  C. Growth of

    1) inservice programs,
    2) media oriented teachers and administrators, and
    3) utilization of instructional media.

II. Benefits to the Participants

  A. Greater employment opportunities;

  B. Increase in professional skills, salary, and degree status; and

C. Stability of employment.

III. Benefits to the Profession

A. Rapid and orderly growth.

B. Strengthening of training programs in colleges and universities by augmenting existing programs and creating new programs. 74/

C. Heightening of standards, or the formulation of standards for media programs.

D. Increased professional recognition from other disciplines; also increased interdisciplinary activity.

E. Training personnel to support higher education programs.

A total of 17,770 persons were trained in long-term, short-term, and Instructional Development Institutes between 1965 and 1971. These numbers are indeed significant when compared to enrollments in comparable programs prior to NDEA and EPDA funding of media institutes.

This LTI study has provided no specific data to substantiate the belief that the goal to produce sufficient trained media personnel has been reached. Rather, it demonstrates an equilibrium between present training and present employment. The high salaries and relatively stable employment situation confirm a satisfactory balance between supply and demand has been achieved. Even with the extensive cutbacks of the late 1960's and 1970's most graduates of academic media programs have been employed in the area of specialization for which they were trained, as evidenced by information from the placement service of the Association for Educational Communication and Technology. Many institute graduates have moved from 'professional' level tasks into the 'directive-administrative' levels. This trend is important, because it will ultimately provide media trained persons at all levels of administration to support and insure successful implementation of media programs (See definitions for 'directive-administrative' and 'professional' on pages 17 and 18.).

This LTI study substantiates the EMIE study in its reported finding that media institutes have strengthened existing formal media programs in colleges and universities.[1] In many instances the institutes provided a core of full-time students with broad professional experience to enrich a student body which was typically part-time and often inexperienced: Higher professional standards were consequent and a greater number of competent, specialized media professionals were available to schools and school systems.

As many institute graduates returned to the world-of-work, some 39.3 percent were employed at the directive-administrative responsibility level. The EMIE study also reported significant administrative media responsibilities for institute graduates,[2] and Hamreus recommended greater attention be given to the development of higher-level administrative skills for media personnel.[3] Data from institute proposals, final reports and the institute director's questionnaire confirms the Hamreus finding: Training in directive-administrative skills--presented by the institutes--relates primarily to the administration of building-level media programs rather than the broader management of school-system or university-wide programs. Meanwhile, the main thrust of institute curriculum was directed to the 'professional' level of responsibilities, the level at which 25.6 percent of all graduates are now employed.

As a result of the institutes, media specialists possess increased and highly specialized skills, as do teachers, administrators

and other professional educators who participated in educational media institutes. The 'multiplier' concept of the educational media institutes is extant. It has been used to extend skills to other teachers and administrators at the local level and in greater numbers than the usual
76/ short-term or long-term institute format could accommodate. Participant/graduates have conducted hundreds of inservice programs for literally thousands of teachers, supervisors, and administrators. As in the findings of the EMIE study, directors and graduates provided written evidence that their training is influencing teachers' media utilization.

In summary, the typical institute participant was male, 39 years of age, had a master's degree and an institute experience that yielded worthwhile benefits to him. Media expertise added approximately $800 to earnings above a comparable teacher or administrator on the salary scale within his school system. Directors reported increased employment opportunities for graduates and evidence of job availability combined with job stability. Graduates hold a vast array of job titles. At the time of the institute, 82.2 percent of participants worked as teachers and administrators in the school system; today, 76.1 percent work in school buildings. Some have joined district, county and state educational agencies in order to more fully utilize their skills. Still others are teaching at the college level.

The institute experience was one of the high points of the participant's academic career, being rated comparable to, if not slightly better than, his graduate training.

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To increase the professional skills of participants, course work included *production, instructional development, management and operations of media services*, with emphasis being greatest on *production*. For institute participants post 1967, *instructional development* was the major content emphasis. Today, on-the-job, the graduate may have some involvement in production or other professional activities, but for those with major responsibilities ('50%-or-more') in media, directive-administrative responsibilities now exceed professional responsibilities.

What were the effects of educational media institutes upon the field? If instant change is the measure of success, failure must be proclaimed. But to value the educational media institutes impact on the field in this way is to disregard much of what is known about the process of educational innovation.

In a short span of time, encompassing less than a decade, the field has witnessed substantial and rapid growth. There is greater acceptance by the classroom teacher and administrator of media's ability to enhance learning. Hardware systems have been improved. Software production has increased. There is greater awareness of the instructional development concept. Increasingly schools are involved in innovative programs, which utilize media, learning centers, etc.

As evidenced by the directors' response, the educational media institutes strengthened academic training programs in colleges and universities by augmenting existing programs and creating new ones. The total impact of the educational media institute program on developing institutions cannot yet be assessed. After the present federally funded program has given way to new and more innovative programs, many institutional programs--initiated under NDEA and EPDA--will continue to contribute to the field of instructional technology through continued research, improved teaching practice, standards development, and continued striving for increased professional development.

In conclusion, media institutes were and continue to be an effective 78/ means of providing media manpower to meet the unprecedented growth in educational technology. Institutes continue to attract mature professionals with some years experience who might otherwise not be able to undertake an intensive training program or to enroll in a program leading to a higher degree. As the need for media personnel continues to grow, the institutes play an essential role in training the requisite number of professionals for the positions available.

Footnotes

[1] James W. Brown, *Educational Media Institute Evaluation Project: Supplementary Report* (San Jose, California: EMIE Project, 1967), pp. 24-29.

[2] Ibid, pp. 18-21.

[3] Jack V. Edling and Dale G. Hamreus, "Current Training Requirements and Recommendations for a Media Specialists Program," *Final Report: LTI Media Specialists Program, 1969-70* (Monmouth, Oregon: Teaching Research Division, Oregon State System of Higher Education, 1970), Appendix G, page 47.

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APPENDIX A

Tables A-1 through A-35

TABLE A-1.--Distribution by Sex of Institute Participants/Graduates Responding to LTI Questionnaire

	1966 (N=477)		1968 (N=225)		1971 (N=54)		TOTAL (N=656)	
	No	%	No	%	No	%	No	%
TOTAL GRADUATE GROUP (combination of two groups below)								
Male	319	84.6	147	65.3	33	61.1	499	76.0
Female	58	15.4	78	34.7	21	38.9	157	24.0
Graduates Whose Present Work Load* is '50%-or-More' Media-Related								
Male	120	83.3	54	60.0	18	66.7	192	73.5
Female	24	16.6	36	40.0	9	33.3	69	26.4
Graduates Whose Present Work Load* is 'Less-than-50%' Media-Related								
Male	199	85.4	93	68.8	15	55.6	307	77.7
Female	34	14.5	42	31.1	12	44.4	88	22.2

NB: Data presented in this table based on responses to Question 1 of Participants' Questionnaire (Appendix C).

**In this report, the terms 'work load', 'responsibilities', and 'work time' are used synonymously.*

TABLE A-2.--Number of Years Institute Graduate Has Been in Present Media Assignment

	1966 (N=303)		1968 (N=175)		1971 (N=46)		TOTAL (N=524)	
	No	%	No	%	No	%	No	%
TOTAL GRADUATE GROUP (combination of two groups below)								
1-4 years	74	24.4	60	34.3	30	65.2	164	31.3
5-8 years	114	37.6	80	45.7	10	21.7	204	38.9
9-12 years	62	20.5	26	14.8	2	4.3	90	17.2
13-16 years	33	10.9	2	1.1	1	2.2	36	6.9
over 17 years	20	6.6	7	4.0	3	6.5	30	5.8
Graduates Whose Present Work Load is '50%-or-More' Media-Related								
1-4 years	34	23.2	30	35.2	15	62.5	79	31.0
5-8 years	67	46.1	40	47.0	6	24.9	113	43.2
9-12 years	25	17.0	10	11.7	2	8.3	37	14.5
13-16 years	11	7.5	1	1.1	-	--	12	4.6
over 17 years	8	5.5	4	4.7	1	4.1	13	5.1
Graduates Whose Present Work Load is 'Less-than-50% Media-Related								
1-4 years	40	25.2	30	33.3	15	68.1	85	31.4
5-8 years	47	29.7	40	44.3	4	18.1	91	33.6
9-12 years	37	23.3	16	17.7	-	--	54	19.5
13-16 years	22	13.8	1	1.1	1	4.5	28	8.8
over 17 years	12	7.5	3	3.3	2	9.0	17	6.2

NB: Data presented in this table based on responses to Question 2 of Participants' Questionnaire (Appendix C).

TABLE A-3.--Number of Years Institute Graduate Has Spent in Media-Related Work

	1966 (N=352)		1968 (N=203)		1971 (N=48)		TOTAL (N=603)	
	No	%	No	%	No	%	No	%
TOTAL GRADUATE GROUP (combination of two groups below)								
1-4 years	29	8.2	26	12.3	17	35.4	72	11.9
5-8 years	103	29.3	70	34.5	11	22.9	184	30.5
9-12 years	96	27.3	45	22.2	7	14.6	148	24.5
13-16 years	53	15.1	22	10.9	4	8.3	79	13.1
over 17 years	71	20.2	40	18.8	9	18.7	120	19.9
Graduates Whose Present Work Load is '50%-or-More' Media-Related								
1-4 years	7	4.7	7	7.7	11	44.0	25	9.5
5-8 years	43	29.8	36	39.6	5	20.0	84	32.2
9-12 years	44	30.4	16	17.6	3	12.0	63	24.2
13-16 years	22	15.2	12	13.2	2	8.0	36	13.8
over 17 years	28	19.4	20	22.0	4	16.0	52	20.0
Graduates Whose Present Work Load is 'Less-than-50% Media-Related								
1-4 years	22	10.5	19	16.9	6	26.0	47	13.6
5-8 years	60	28.8	34	30.3	6	25.9	100	29.1
9-12 years	52	24.9	29	25.8	4	17.3	85	24.6
13-16 years	31	14.8	10	8.8	2	8.6	43	12.5
over 17 years	43	20.6	20	17.8	5	21.7	68	19.8

NB: Data presented in this table based on responses to Question 3 of Participants' Questionnaire (Appendix C).

TABLE A-4.--Highest Degree Held by Participants at Time of Institute

Degree	1966 (N=380) No	1966 (N=380) %	1968 (N=227) No	1968 (N=227) %	1971 (N=53) No	1971 (N=53) %	TOTAL (N=660) No	TOTAL (N=660) %
TOTAL PARTICIPANT GROUP (combination of two groups below)								
High School	—	—	—	—	—	—	—	—
Associate	—	—	—	—	1	1.9	1	0.1
Bachelors	126	33.2	62	27.3	13	24.5	201	30.4
Masters	244	64.2	152	67.0	37	71.1	433	65.6
Doctorate	6	1.6	4	1.8	1	1.9	11	1.7
Specialist (A.G.S.)	4	1.0	9	4.0	1	1.9	14	2.1
Participants Whose Present Work Load is '50%-or-More' Media-Related								
High School	—	—	—	—	—	—	—	—
Associate	—	—	—	—	1	3.8	1	.3
Bachelors	54	37.0	29	32.2	7	26.9	90	34.3
Masters	87	59.6	60	66.6	17	65.3	164	62.5
Doctorate	1	.7	—	—	—	—	1	.3
Specialist (A.G.S.)	4	2.8	1	1.1	1	3.8	6	2.8
Participants Whose Present Work Load is 'Less-than-50%' Media-Related								
High School	—	—	—	—	—	—	—	—
Associate	—	—	—	—	—	—	—	—
Bachelors	72	30.7	33	24.1	6	22.2	111	27.8
Masters	157	67.0	92	67.2	20	74.1	269	67.5
Doctorate	5	2.1	4	2.9	1	3.7	10	2.5
Specialist (A.G.S.)	—	—	8	5.9	—	—	8	2.0

NB: Data presented in this table based on responses to Question 4 of Participants' Questionnaire (Appendix C).

TABLE A-5.--Highest Degree Now Held by Institute Graduates

	1966 (N=381)		1968 (N=228)		1971 (N=53)		TOTAL (N=662)	
	No	%	No	%	No	%	No	%
Degree	TOTAL GRADUATE GROUP (combination of two groups below)							
High School	—	—	—	—	—	—	—	—
Associate	—	—	—	—	1	2.0	1	0.1
Bachelors	58	15.2	38	16.7	5	9.4	101	15.3
Masters	276	72.4	166	72.8	39	73.6	481	72.7
Doctorate	17	4.5	9	3.9	4	7.5	30	4.5
Specialist	30	7.9	15	6.6	4	7.6	49	7.4
	Graduates Whose Present Work Load is '50%-or-More' Media-Related							
High School	—	—	—	—	—	—	—	—
Associate	—	—	—	—	1	3.8	1	.3
Bachelors	17	11.6	17	18.7	4	15.3	38	14.4
Masters	105	71.9	66	72.5	17	65.3	188	71.4
Doctorate	10	6.8	2	2.2	2	7.6	14	5.3
Specialist	14	9.6	6	6.6	2	7.6	22	8.3
	Graduates Whose Present Work Load is 'Less-than-50%' Media-Related							
High School	—	—	—	—	—	—	—	—
Associate	—	—	—	—	—	—	—	—
Bachelors	41	17.4	21	15.3	1	3.7	63	15.7
Masters	171	72.7	100	73.0	22	81.5	293	73.4
Doctorate	7	2.9	7	5.1	2	7.4	16	4.0
Specialist	16	6.7	9	6.6	2	7.4	27	6.7

NB: Data presented in this table based on response to Question 5 of Participants' Questionnaire (Appendix C).

TABLE A-6.--Participants Age at Time of Institute

	1966 (N=380)		1968 (N=227)		1971 (N=54)		TOTAL (N=661)	
	No	%	No	%	No	%	No	%
Age								
25 years or less	10	2.6	5	2.2	6	11.1	21	3.2
26-35	124	32.6	53	23.3	7	13.0	184	27.8
36-45	175	46.0	110	48.5	28	51.9	313	47.5
46-55	59	15.5	55	24.2	10	18.6	124	18.8
56-over	12	3.2	4	1.8	3	5.6	19	2.9

NB: Data presented in this table based on response to Question 6 of Participants' Questionnaire (Appendix C).

TABLE A-7.--Graduates Present Job Titles

Job Titles (in order of frequency)	1966 (N=382)	1968 (N=228)	1971 (N=54)	TOTALS (N=664)
Teacher	53	34	10	97
Principal	55	37	2	94
Librarian	12	21	4	37
Audiovisual Director	25	3	1	29
Department Head-Chairman	12	12	--	24
Audiovisual Coordinator	16	5	1	22
Assistant Superintendent	15	5	1	21
Librarian AV Coordinator	13	7	--	20
Director, Instructional Materials Center/Media Center, Learning Resources Center	11	7	1	19
Superintendent	12	7	--	19
Media Specialist	8	5	4	17
Teacher Coordinator	13	3	--	16
Supervisor of Subject Areas	7	7	1	15
Assistant Principal	4	7	2	13
Media Director	4	7	1	12
Administrator of Federal Programs	6	5	--	11
Director Media Services	9	--	2	11
Teacher AV Director	10	--	1	11
Librarian Media Specialist	3	5	2	10
Coordinator of Instructional Media	5	2	2	9
Director/Coordinator of Instructional Resources	3	4	2	9
District AV Director	7	1	1	9
Education Specialist	1	6	2	9
No Response	8	--	1	9
Professor of Education	6	1	1	8
Coordinator of Instructional Materials	2	4	1	7
Curriculum Coordinator	6	--	1	7
Supervisor of Media	4	3	--	7
Administrative Assistant	3	3	--	6
Audiovisual Consultant	3	3	--	6
Curriculum Director	6	--	--	6
Media Coordinator	--	5	1	6
Audiovisual Director-Teacher	5	--	--	5
Coordinator of Educational Instructional TV	4	1	--	5
Director of Instruction	1	3	--	4
Director of Instructional TV	3	--	1	4
Supervisor of Principals	4	--	--	4
Director of Libraries	1	1	2	4
Audiovisual Director-Principal	3	--	--	3
Director of Instructional Materials	2	--	1	3
Director Instructional Media	1	2	--	3
District Librarian	2	1	--	3
Media Communication Specialist	2	1	--	3

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TABLE A-7.--Continued

Job Titles (in order of frequency)	1966 (N=332)	1968 (N=228)	1971 (N=54)	TOTAL (N=664)
Administrative Supervisor	2	--	--	2
Assistant Superintendent of Curriculum	2	--	--	2
Department Head -AV Coordinator	2	--	--	2
Director of Media and Libraries	1	1	--	2
Graphics Artist	1	1	--	2
Supervisor of Instructional Materials	--	--	2	2
Supervisor of Teachers	--	2	--	2
Television Teacher	1	1	--	2
AV-TV Coordinator	1	--	--	1
Curriculum Director-AV Director	--	1	--	1
Curriculum Materials Specialist	--	1	-	1
Instructional Television Utilization Specialist	--	1	--	1
Media Aide	--	--	1	1
Media Technologists	1	--	--	1
Professor of Media	--	--	1	1
Public Relations	--	1	--	1
Public Relations Director	--	--	1	1
Supervisor of AV Services	--	1	--	1
Supervisor of Instructional Television	1	--	--	1

NB: Data presented in this table based on responses to Question 7 of Participants' Questionnaire (Appendix C).

TABLE A-8.--Twelve Most Frequently Reported Job Titles in Relation to Percent of Graduates' Work Load Spent in Media-Related Activities

Job Title Reported	Number of Times Reported
Graduates Whose Work Load is '50%-or-More' In Media	
1. Librarian	29
2. Audiovisual Director	25
3. Director, Instructional Materials Center/ Media Center/Learning Resource Center	15
4. AV Coordinator	14
5. Media Specialist	14
6. Librarian-AV Coordinator	12
7. Director/Coordinator, Instructional Resources	9
8. Director, Media Services	9
9. Media Director	9
10. Teacher	9
11. Coordinator of Instructional Materials	8
12. District Audiovisual Director	8
Graduates Whose Work Load is 'Less-than-50%' in Media	
1. Principal	90
2. Teacher	88
3. Assistant Superintendent	21
4. Department Head/Chairman	21
5. Superintendent	19
6. Teacher-Coordinator	14
7. Assistant Principal	13
8. Supervisor of Subject Areas	12
9. Administrator of Federal Programs	10
10. Teacher-Audiovisual Director	10
11. Audiovisual Coordinator	8
12. Librarian	8

NB: Data presented in this table based on responses to Question 7 of Participants' Questionnaire (Appendix C).

TABLE A-9.--Percent of Graduates' Work Load Now Spent in Media-Related Activities

	1966 (N=383)		1968 (N=228)		1971 (N=54)		TOTAL (N=664)	
	No	%	No	%	No	%	No	%
'50%-or-More' of Work Load is in Media	147	38.4	91	39.9	27	50.0	264	39.8
'Less-than-50%' of Work Load is in Media	236	61.6	137	60.0	27	50.0	400	60.2

NB: Data presented in this table based on responses to Question 8 of Participants' Questionnaire (Appendix C).

TABLE A-10.--Media Job Levels for Institute Participants/Graduates*

	1966 (N=382)	1968 (N=228)	1971 (N=54)	TOTAL (N=664)
	Post-Institute			
Directive/Administrative	38.5	41.8	34.2	39.3
Professional	23.2	27.0	36.3	25.6
Artistic-Technical	9.0	5.7	9.3	7.9
Clerical-Manual	11.7	8.8	7.0	10.3
Other	17.4	16.6	13.2	16.9
	Pre-Institute			
Directive/Administrative	29.3	35.5	30.2	31.5
Professional	29.8	31.8	42.7	31.5
Artistic-Technical	8.1	5.9	6.3	7.2
Clerical-Manual	12.8	9.2	6.8	11.1
Other	20.0	17.4	13.9	18.6

*Percentages based on mean of responses.

NB: Data presented in this table is based on responses to Questions 9 and 20 of Participants' Questionnaire (Appendix C).

TABLE A-11.--Job Levels for Institute Participants/Graduates Whose Present Work Load is '50%-or-More' in Media-Related Activities*

	1966 (N=146)	1968 (N=91)	1971 (N=27)	TOTAL (N=264)
Post-Institute				
Directive/Administrative	43.2	42.7	31.2	41.8
Professional	31.4	35.1	53.6	34.9
Artistic-Technical	12.1	7.9	9.7	10.4
Clerical-Manual	12.2	10.0	5.2	10.7
Other	1.1	4.3	0.3	2.1
Pre-Institute				
Directive/Administrative	21.5	27.7	31.1	24.6
Professional	37.9	39.5	46.9	39.4
Artistic-Technical	12.5	9.6	7.8	11.0
Clerical-Manual	14.6	12.5	5.5	12.8
Other	13.5	10.7	8.7	2.2

*Percentages based on mean of responses.

NB: Data presented in this table is based on responses to Questions 9 and 20 of Participants' Questionnaire (Appendix C).

TABLE A-12.--Job Levels for Institute Participants/Graduates Whose Present Work Load is 'Less-than-50%'in Media-Related Activities*

	1966 (N=236)	1968 (N=137)	1971 (N=27)	TOTAL (N=400)
		Post-Institute		
Directive/Administrative	35.7	41.3	37.2	37.7
Professional	18.3	21.7	19.0	19.5
Artistic-Technical	7.4	4.2	8.8	6.4
Clerical-Manual	11.3	8.0	8.8	10.0
Other	28.4	24.8	26.2	26.4
		Pre-Institute		
Directive/Administrative	34.2	40.8	29.4	36.1
Professional	25.0	26.8	38.5	26.5
Artistic-Technical	5.7	3.5	4.9	4.9
Clerical-Manual	11.9	7.1	8.1	10.0
Other	23.7	21.9	19.2	22.5

*Percentages based on mean of responses.

NB: Data presented in this table is based on responses to Questions 9 and 20 of Participants' Questionnaire (Appendix C).

TABLE A-13.--Media Job Functions of Institute Participants/Graduates*

	1966 (N=382)	1968 (N=228)	1971 (N=54)	TOTAL (N=664)
		Post-Institute		
Research	2.6	3.1	5.1	2.9
Evaluation	8.5	9.4	10.9	9.0
Design	4.1	4.1	7.9	4.4
Production	8.5	4.9	6.8	7.1
Logistics	11.5	13.5	9.1	12.0
Utilization	14.0	17.4	15.8	15.3
Organizational Management	14.5	15.7	12.4	14.8
Information Management	7.2	9.0	8.8	8.0
Personnel Management	9.1	7.4	7.1	8.4
Other	19.9	15.4	16.0	18.0
		Pre-Institute		
Research	2.0	2.1	3.3	2.2
Evaluation	5.0	5.9	8.6	5.6
Design	2.8	3.6	5.9	3.3
Production	9.5	5.2	6.9	7.8
Logistics	14.1	12.2	11.5	13.3
Utilization	17.5	18.3	17.1	17.7
Organizational Management	14.0	13.1	11.1	13.5
Information Management	6.7	8.0	5.2	7.0
Personnel Management	5.8	6.6	6.2	6.1
Other	22.4	24.9	24.0	23.5

*Percentages based on mean of responses.

NB: Data presented in this table is based on responses to Questions 10 and 21 of Participants' Questionnaire (Appendix C).

TABLE A-14.--Media Job Functions of Institute Participants/Graduates Whose Present Work Load is '50%-or-More' in Media-Related Activities*

	1966 (N=146)	1968 (N=91)	1971 (N=27)	TOTAL (N=264)
Post-Institute				
Research	3.8	4.1	5.4	4.1
Evaluation	8.8	9.7	13.3	9.6
Design	5.5	5.5	6.5	5.6
Production	12.6	6.9	9.4	10.3
Logistics	13.4	17.9	11.5	14.7
Utilization	14.0	14.4	17.8	14.5
Organizational Management	18.6	15.9	13.0	17.0
Information Management	9.7	11.7	9.4	10.3
Personnel Management	9.4	7.7	5.9	8.5
Other	4.3	6.2	7.8	5.3
Pre-Institute				
Research	1.7	2.6	4.2	2.3
Evaluation	4.6	4.9	9.2	5.2
Design	4.5	5.1	4.1	4.4
Production	14.6	7.9	8.9	11.7
Logistics	17.4	19.4	11.7	17.5
Utilization	16.0	16.7	13.3	16.0
Organizational Management	13.7	14.3	11.5	13.7
Information Management	7.6	9.3	6.1	8.0
Personnel Management	4.3	5.0	4.2	4.6
Other	15.9	13.1	26.7	16.7

*Percentages based on mean of responses.

NB: Data presented in this table is based on responses to Questions 10 and 21 of Participants' Questionnaire (Appendix C).

TABLE A-15.--Media Job Functions of Institute Participants/Graduates Whose Present Work Load is 'Less-than-50%' in Media-Related Activities*

	1966 (N=236)	1968 (N=137)	1971 (N=27)	TOTAL (N=400)
		Post-Institute		
Research	2.2	1.7	2.4	2.1
Evaluation	5.2	6.6	8.0	5.9
Design	1.9	2.5	7.8	2.5
Production	6.4	3.4	4.9	5.2
Logistics	12.1	7.5	11.2	10.5
Utilization	18.3	19.4	20.9	18.9
Organizational Management	14.2	12.4	10.8	13.3
Information Management	6.1	7.1	4.4	6.4
Personnel Management	6.7	7.7	8.2	7.1
Other	26.5	31.6	21.3	28.2
		Pre-Institute		
Research	2.0	8.0	4.8	2.3
Evaluation	8.4	2.4	8.5	8.7
Design	3.3	9.1	9.3	3.7
Production	6.2	3.2	4.2	5.2
Logistics	10.5	3.5	6.7	10.3
Utilization	14.1	10.6	13.8	15.9
Organizational Management	12.2	19.4	11.8	13.3
Information Management	6.0	15.6	8.1	6.5
Personnel Management	8.9	7.1	8.2	8.3
Other	28.4	20.9	24.7	21.9

*Percentages based on mean of responses.

NB: Data presented in this table is based on responses to Questions 10 and 21 of Participants' Questionnaire (Appendix C).

TABLE A-16.--Description of Graduates' Present Media Responsibilities

Descriptions*	1966 (N=343)		1968 (N=211)		1971 (N=50)		TOTAL (N=604)	
	No	%	No	%	No	%	No	%
TOTAL GRADUATE GROUP (combination of two groups below)								
#1	102	29.7	60	28.4	7	14.0	169	27.9
#2	165	48.2	102	48.3	34	68.0	301	48.8
Other	76	22.1	49	23.8	9	18.0	134	22.2
Graduates Whose Work Load is '50%-or-More' Media-Related								
#1	42	28.9	29	32.5	3	11.1	74	28.3
#2	78	53.7	44	49.4	21	77.8	143	54.7
Other	25	17.2	16	17.9	3	11.1	44	16.8
Graduates Whose Work Load is 'Less-than-50%' Media-Related								
#1	60	30.3	31	25.4	4	17.3	95	27.6
#2	87	43.9	58	47.5	13	56.5	158	46.0
Other	51	25.7	33	27.0	6	26.0	90	26.2

*Descriptions:

#1: Distribution of hardware and software to users.

#2: Working directly with teachers, students and administrators in designing, implementing, and evaluating the total process of learning and teaching in terms of specific behaviors.

Other: Combination of #1 and #2, or media responsibilities were defined as "instructional development."

NB: Data presented in this table based on responses to Question 11 of Participants' Questionnaire (Appendix C).

TABLE A-17.--Present Professional Affiliation of Institute Graduates

Professional Affiliation	1966 (N=382) No	1966 (N=382) %	1968 (N=228) No	1968 (N=228) %	1971 (N=54) No	1971 (N=54) %	TOTAL (N=664) No	TOTAL (N=664) %
TOTAL GRADUATE GROUP (combination of two groups below)								
Elementary-Secondary School	302	79.1	169	74.1	34	63.0	505	76.1
County-District Agency	26	6.8	20	8.8	6	11.1	52	7.8
State Educational Agency	10	2.6	18	7.9	4	7.4	32	4.8
Community College	10	2.6	4	1.8	1	1.9	15	2.3
College and University	20	5.2	7	3.1	6	11.1	33	5.0
Business and Industry	—	—	1	0.4	—	—	1	0.2
Military	—	—	—	—	—	—	—	—
Government	1	0.3	1	0.4	—	—	2	0.3
Other	13	3.4	8	3.5	3	5.6	24	3.6
Graduates Whose Work Load is '50%-or-More' Media-Related								
Elementary-Secondary School	104	71.2	57	62.6	17	63.0	178	67.4
County-District Agency	15	10.3	7	7.7	2	7.4	24	9.1
State Educational Agency	6	4.1	13	14.3	4	14.8	23	8.7
Community College	5	3.4	2	2.2	1	3.7	8	3.0
College and University	12	8.2	5	5.5	3	11.1	20	7.6
Business and Industry	—	—	—	—	—	—	—	—
Military	—	—	—	—	—	—	—	—
Government	1	0.7	1	1.1	—	—	2	0.8
Other	3	2.1	6	6.6	—	—	9	3.4
Graduates Whose Work Load is 'Less-than-50%' Media-Related								
Elementary-Secondary School	198	83.9	112	81.8	17	63.0	327	81.7
County-District Agency	11	4.7	13	9.5	4	14.8	28	7.0
State Educational Agency	4	1.7	5	3.6	—	—	9	2.2
Community College	5	2.1	2	1.5	—	—	7	1.7
College and University	8	3.4	2	1.5	3	11.1	13	3.2
Business and Industry	—	—	1	0.7	—	—	1	0.2
Military	—	—	—	—	—	—	—	—
Government								
Other	10	4.3	2	1.4	3	11.1	15	3.7

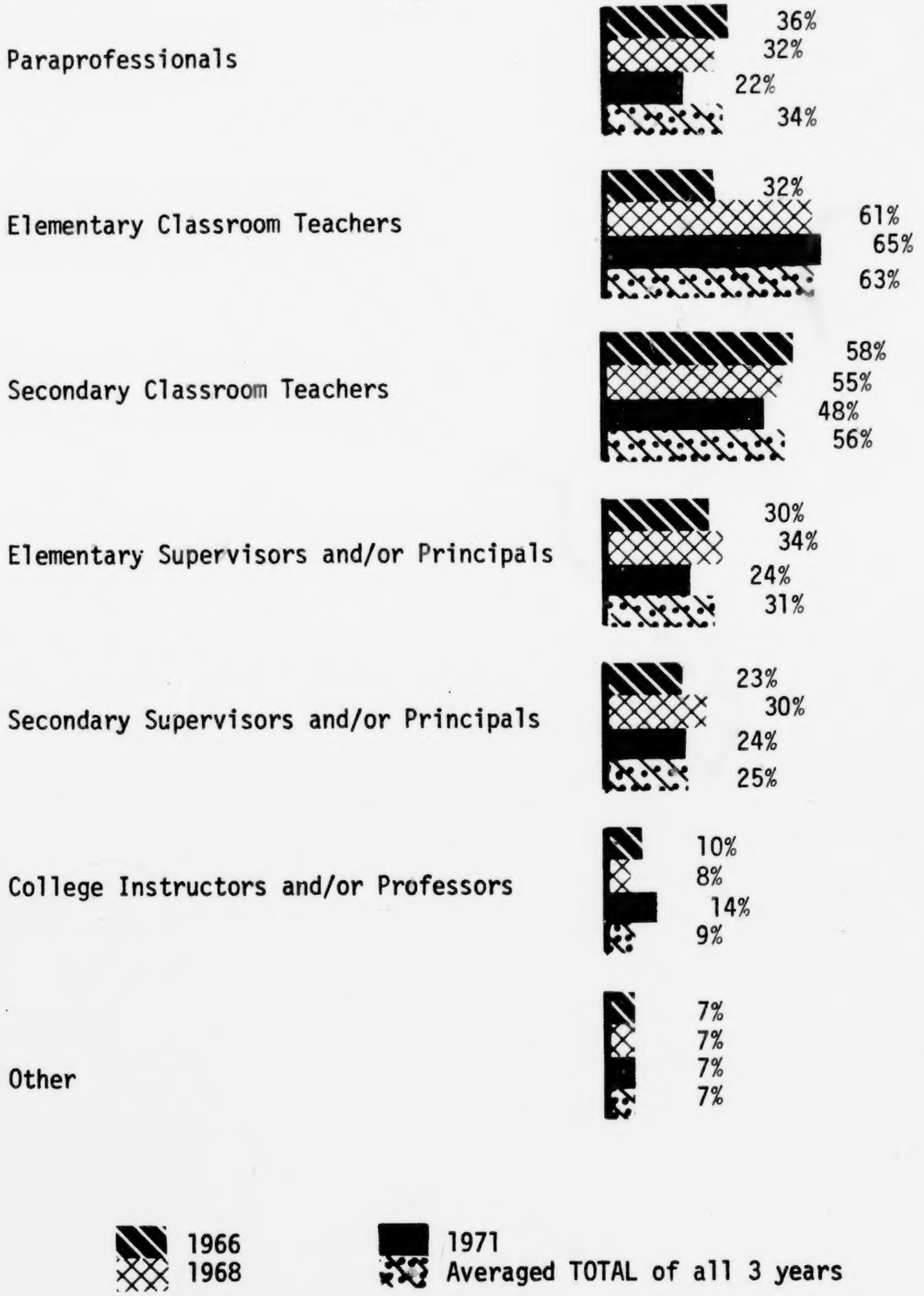
NB: Data presented in this table based on responses to Question 12 of Participants' Questionnaire (Appendix C).

TABLE A-18.--Institute Graduates Conducting Workshops or Inservice Programs

	1966 (N=380)		1968 (N=223)		1971 (N=53)		TOTAL (N=656)	
	No	%	No	%	No	%	No	%
TOTAL GRADUATE GROUP (combination of two groups below)								
YES, have conducted workshops	317	83.4	175	78.5	41	77.4	533	81.2
NO, have not conducted workshops	63	16.6	48	21.5	12	22.6	123	18.7
Graduates Whose Work Load is '50%-or-More' Media-Related								
YES, have conducted workshops	135	92.5	71	80.6	21	80.7	227	87.3
NO, have not conducted workshops	11	7.5	17	19.3	5	19.2	33	12.6
Graduates Whose Work Load is 'Less-than-50%' Media-Related								
YES, have conducted workshops	182	77.7	104	77.6	20	74.1	306	77.2
NO, have not conducted workshops	52	22.2	31	23.1	7	25.9	90	22.7

NB: Data presented in this table based on responses to Question 13 of Participants' Questionnaire (Appendix C).

TABLE A-19.--Audience for Whom Institute Graduates Conducted Workshops



NB: Percentages are based on the mean of responses. Data presented in this table based on responses to Question 14 of Participants' Questionnaire (Appendix C).

TABLE A-20.--Number of Workshops or Inservice Programs Conducted Per Institute Graduate

Number of Workshops	1966 (N=313)		1968 (N=179)		1971 (N=43)		TOTAL (N=535)	
	No	%	No	%	No	%	No	%
TOTAL GRADUATE GROUP (combination of two groups below)								
1-5	144	46.0	108	60.3	30	69.8	282	52.7
5-10	72	23.0	32	29.6	8	18.6	112	20.9
10-15	35	11.1	7	3.9	2	4.6	44	8.2
15-20	14	4.5	7	3.9	1	2.3	22	4.1
20-25	8	2.6	3	1.7	1	2.3	12	2.2
over 25	40	12.8	22	12.3	1	2.3	63	11.8
Graduates Whose Work Load is '50%-or-More' Media-Related								
1-5	43	31.8	26	36.1	12	54.5	81	35.4
5-10	23	17.0	15	20.8	5	22.7	43	18.8
10-15	22	16.3	4	5.5	2	9.0	28	12.2
15-20	7	5.2	7	9.7	1	4.5	15	6.5
20-25	6	4.4	3	4.2	1	4.5	10	4.4
over 25	34	25.2	17	23.6	1	4.5	52	22.7
Graduates Whose Work Load is 'Less-than-50%' Media-Related								
1-5	101	56.7	82	76.6	18	85.7	201	65.7
5-10	49	27.5	17	15.9	3	14.3	69	22.5
10-15	13	7.3	3	2.8	—	—	16	5.2
15-20	7	3.9	—	—	—	—	7	2.3
20-25	2	1.1	—	—	—	—	2	0.6
over 25	6	3.4	5	4.7	—	—	11	3.6

NB: Data presented in this table is based on responses to Question 15 of Participants' Questionnaire (Appendix C).

TABLE A-21.--Number of Attendees at Workshops or Inservice Programs
Reported in TABLE A-20.

	1966 (N=382)		1968 (N=228)		1971 (N=54)		TOTAL (N=664)	
Number of Attendees	No	%	No	%	No	%	No	%
TOTAL GRADUATE GROUP (combination of two groups below)								
1-50	108	28.3	74	32.5	24	44.4	206	31.0
50-100	76	19.9	30	13.2	9	16.7	115	17.3
100-150	25	6.5	14	6.1	2	3.7	41	6.2
150-200	22	5.8	10	4.4	2	3.7	34	5.1
200-250	17	4.5	10	4.4	2	3.7	29	4.4
250-300	16	4.2	8	3.5	—	—	24	3.6
300-350	6	1.6	5	2.2	2	3.7	13	2.0
350-400	4	1.0	2	0.9	—	—	6	0.9
400-over	39	10.2	24	10.5	3	5.6	66	9.9
NR	69	18.1	51	22.4	10	18.5	130	19.6
Graduates Whose Work Load is '50%-or-More' Media-Related								
1-50	34	23.3	18	19.8	11	40.7	63	23.9
50-100	26	17.8	13	14.3	4	14.8	43	16.3
100-150	8	5.5	5	5.5	2	7.4	—	—
150-200	5	3.4	5	5.5	1	3.7	11	4.2
200-250	9	6.2	6	6.6	2	7.4	17	6.4
250-300	10	6.8	5	5.5	—	—	15	5.7
300-350	3	2.1	2	2.2	1	3.7	6	2.3
350-400	4	2.7	1	1.1	—	—	5	1.9
400-over	36	24.7	17	18.7	2	7.4	55	20.8
NR	11	7.5	19	20.9	4	14.8	34	12.9

-- continued

TABLE A-21.--continued

	Graduates Whose Work Load is 'Less-than-50%' Media-Related							
1-50	74	31.4	56	40.9	13	48.1	143	35.7
50-100	50	21.2	17	12.4	5	18.5	72	18.0
100-150	17	7.2	9	6.6	—	—	26	6.5
150-200	17	7.2	5	3.6	1	3.7	23	5.7
200-250	8	3.4	4	2.9	—	—	12	3.0
250-300	6	2.5	3	2.2	—	—	9	2.2
300-350	3	1.3	3	2.2	1	3.7	7	1.7
350-400	—	—	1	0.7	—	—	1	0.2
400-over	3	1.3	7	5.1	1	3.7	11	2.7
NR	58	24.6	32	23.4	6	22.2	96	24.0

NB: Data presented in this table is based on responses to Question 16 of Participants' Questionnaire (Appendix C).

TABLE A-22.--Present Salary Compensation for Media Responsibilities

	1966* (N=309)		1968* (N=168)		1971 (N=47)		TOTAL (N=524)	
	No	%	No	%	No	%	No	%
TOTAL GRADUATE GROUP (combination of two groups below)								
Same salary base as classroom teacher	188	60.8	119	70.8	28	59.6	335	63.9
100-300 more	14	4.5	7	4.2	1	2.1	22	4.2
300-600 more	16	5.2	6	3.6	2	4.2	24	4.6
600-900 more	15	4.8	4	2.4	4	8.5	23	4.4
900-1200 more	12	3.9	5	3.0	3	6.4	20	3.8
over 1200 more	44	14.2	23	13.7	4	8.5	71	13.5
other	20	6.5	4	2.4	5	10.6	29	5.5
Graduates Whose Work Load is '50%-or-More' Media-Related								
Same salary base as classroom teacher	67	50.3	46	63.8	14	56.0	127	55.2
100-300 more	4	3.0	2	2.7	—	—	6	2.6
300-600 more	4	3.0	5	6.9	1	4.0	10	4.3
600-900 more	11	8.2	1	1.3	4	16.0	16	6.9
900-1200 more	7	5.2	2	2.7	1	4.0	10	4.3
over 1200 more	33	24.8	14	19.4	2	8.0	49	21.3
other	7	5.2	2	2.6	3	12.0	12	5.2
Graduates Whose Work Load is 'Less-than-50%' Media-Related								
Same salary base as classroom teacher	121	68.7	73	76.0	14	63.6	208	70.7
100-300 more	10	5.6	5	5.2	1	4.5	16	5.4
300-600 more	12	6.8	1	1.0	1	4.5	14	4.7
600-900 more	4	2.2	3	3.1	—	—	7	2.3
900-1200 more	5	2.8	3	3.1	2	9.0	10	3.4
over 1200 more	11	6.2	9	9.3	2	9.0	22	7.4
other	13	7.2	2	2.0	2	9.0	17	5.7

* Eight responses from 1966 and two from 1968 were classified as 'other': although they reported additional monetary compensation, they did not designate the amount of the increment.

NB: Data presented in this table based on responses to Question 17 of Participants' Questionnaire (Appendix C).

TABLE A-23.--Post Institute Changes in Graduates' Job Assignments

	1966 (N=378)		1968 (N=222)		1971 (N=54)		TOTAL (N=654)	
	No	%	No	%	No	%	No	%
TOTAL GRADUATE GROUP (Combination of two groups below)								
No change in job assignment	230	60.8	155	69.8	45	83.3	430	65.7
Changed because of disenchantment with school system post institute	5	1.3	2	0.9	2	3.7	9	1.4
Changed because of new opportunity as result of institute training	41	10.8	16	7.1	2	3.7	59	9.0
Other*	102	27.0	49	22.1	5	9.3	156	23.8
Graduates Whose Work Load is '50%-or-More' Media-Related								
No change in job assignment	95	65.1	59	62.3	22	81.5	176	67.2
Changed because of disenchantment with school system post institute	1	0.7	—	—	1	3.7	2	0.8
Changed because of new opportunity as result of institute training	20	13.7	12	13.8	1	3.7	33	12.6
Other*	30	20.6	18	20.2	3	11.1	51	19.5
Graduates Whose Work Load is 'Less-than-50%' Media-Related								
No change in job assignment	135	58.2	96	67.2	23	85.2	254	64.8
Changed because of disenchantment with school system post institute	4	1.7	2	1.5	1	3.7	7	1.8
Changed because of new opportunity as result of institute training	21	9.0	4	3.0	1	3.7	26	6.6
Other*	72	21.0	31	23.3	2	7.4	105	26.8

*Other includes promotions within the education system not necessarily attributable to institute training (e.g., principals, supervisors, superintendent/assistant superintendents).

NB: Data presented in this table based on response to Question 18 of Participants' Questionnaire (Appendix C).

TABLE A-24.--Participants' Job Titles Prior to Institute Training

Job Titles (in order of frequency)	1966	1968	1971	TOTAL
Teacher	80	41	16	137
Principal	48	37	10	86
Librarian	22	32	8	62
Teacher-Coordinator	39	6	--	45
Audiovisual Director	21	10	3	34
Audiovisual Coordinator	24	7	2	33
Department Head-Chairman	4	10	1	15
Superintendent	8	5	--	13
Assistant Principal	4	7	1	12
No Response	10	1	1	12
Audiovisual Director-Teacher	11	--	--	11
Professor of Education	7	2	1	10
Supervisor of Subject Areas	2	6	2	10
Teacher-AV Director	8	2	--	10
Librarian-AV Coordinator	4	5	--	9
Media Specialists	4	4	1	9
Audiovisual Director-Principal	8	--	--	8
Curriculum Coordinator	6	1	1	8
Director of Instructional Materials	5	2	1	8
Administrator of Federal Programs	3	4	--	7
Assistant Superintendent	3	3	1	7
Curriculum Director	6	1	--	7
Director, Instructional Materials Center/Media Center, Learning Resources Center	4	2	1	7
Audiovisual Consultant	2	4	--	6
Administrative Assistant	2	2	1	5
Coordinator of Instructional Materials	3	1	1	5
Director of Instruction	2	3	--	5
Education Specialist	1	3	1	5
Graphics Artist	3	2	--	5
Librarian-Media Specialist	1	3	1	5
Librarian-Teacher	2	3	--	5
Coordinator of Instructional Media	3	1	--	4
Department Head-AV Coordinator	4	--	--	4
Director Media Services	2	1	1	4
Media Director	3	1	--	4
TV Teacher	3	1	--	4
Coordinator of Educational/Instructional TV	3	--	--	3
Director of Instructional TV	1	1	1	3
Director of Libraries	1	--	2	3
District AV Director	2	1	--	3
Media Coordinator	--	3	--	3
Supervisor of AV Services	--	3	--	3
Supervisor of Media Services	2	1	--	3
Director of Media and Libraries	2	--	--	2
District Librarian	--	2	--	2
Media Communication Specialist	1	1	--	2
Public Relations Director	1	--	1	2

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TABLE A-24.--Continued

Job Titles (in order of frequency)	1966	1968	1971	TOTAL
Supervisor of Instructional Materials	--	1	1	2
Supervisor of Principals	2	--	--	2
Assistant Supervisor of Curriculum	1	--	--	1
AV-TV Coordinator	1	--	--	1
Computer-Assisted Instruction Teacher Specialist	--	--	1	1
Curriculum Director - AV Director	1	--	--	1
Curriculum Materials Specialist	--	1	--	1
Department Head-AV Director	1	--	--	1
Director, Instructional Technology	--	1	--	1
Instructional TV Utilization Specialist	1	--	--	1
Media Aide	--	--	1	1
Professor of Media	--	--	1	1

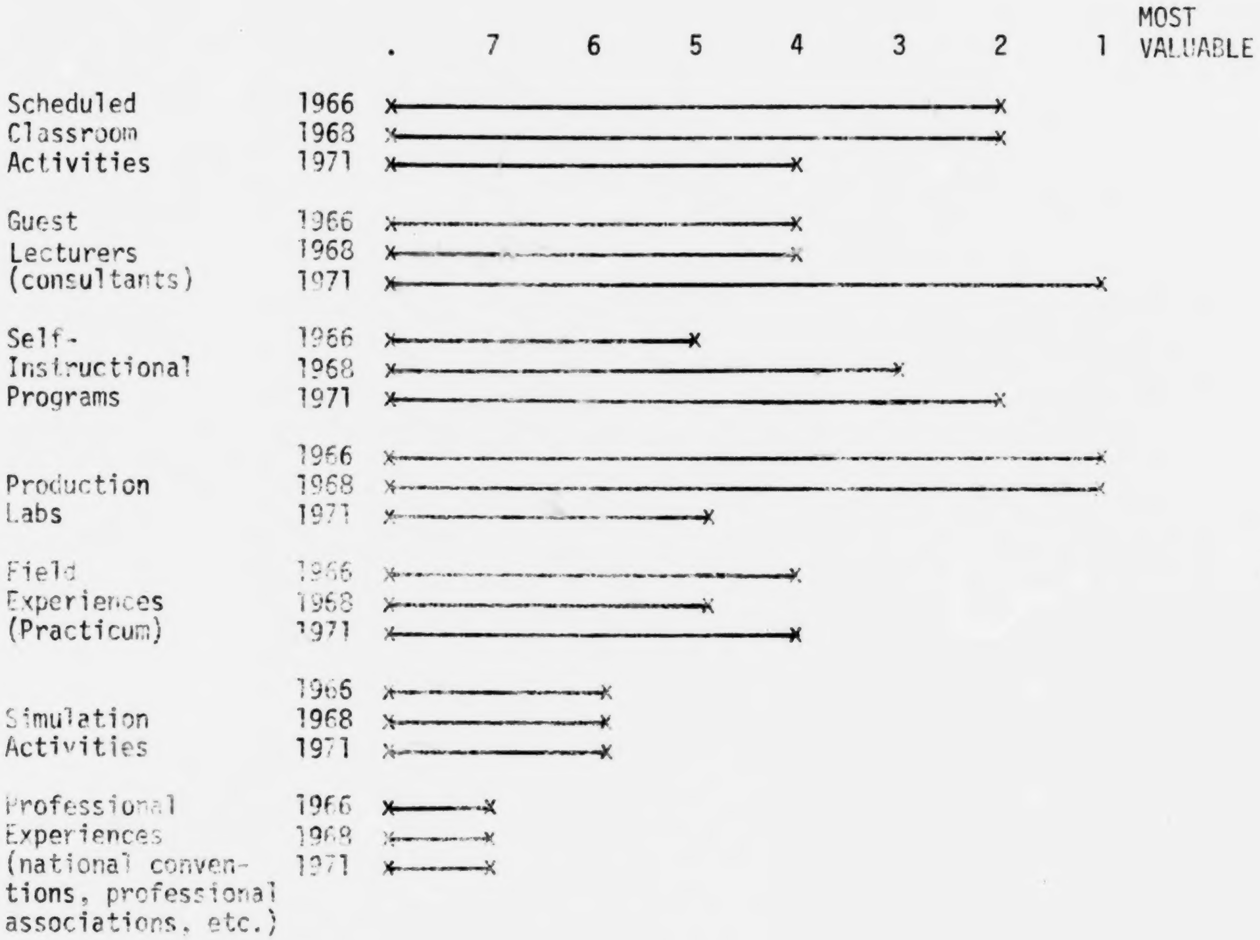
NB: Data presented in this table based on responses to Question 19 of Participants' Questionnaire (Appendix C).

TABLE A-25.--Pre-Institute Professional Affiliation of Institute Graduates

	1966 (N=382)		1968 (N=228)		1971 (N=54)		TOTAL (N=664)	
	No	%	No	%	No	%	No	%
TOTAL GRADUATE GROUP (combination of two groups below)								
Elementary-Secondary School	332	86.9	179	78.5	35	64.8	546	82.2
County-District Agency	16	4.2	18	7.9	8	14.8	42	6.3
State Education Agency	4	1.0	15	6.6	2	3.7	21	3.2
College or University	17	4.5	6	2.6	4	7.4	27	4.1
Community College	4	1.0	3	1.3	1	1.9	8	1.2
Business and Industry	—	—	—	—	1	1.9	1	0.2
Military	—	—	—	—	—	—	—	—
Government	1	0.3	—	—	1	1.9	2	0.3
Other	8	2.1	7	3.1	2	3.7	17	2.6
Graduates Whose Work Load is '50%-or-More' Media-Related								
Elementary-Secondary School	215	91.1	115	83.9	17	63.0	347	86.7
County-District Agency	5	2.1	11	8.0	6	22.2	22	5.5
State Education Agency	1	0.4	4	2.9	—	—	5	1.2
College or University	8	3.4	1	0.7	2	7.4	11	2.7
Community College	2	0.8	1	0.7	—	—	3	0.7
Business and Industry	—	—	—	—	—	—	—	—
Military	—	—	—	—	—	—	—	—
Government	—	—	—	—	—	—	—	—
Other	5	2.1	5	3.7	2	7.4	12	2.9
Graduates Whose Work Load is 'Less-than-50%' Media Related								
Elementary-Secondary School	117	80.1	64	70.3	18	66.7	199	75.4
County-District Agency	11	7.5	7	7.7	2	7.4	20	7.6
State Education Agency	3	2.1	11	12.1	2	7.4	16	6.1
College or University	9	6.2	5	5.5	2	7.4	16	6.1
Community College	2	1.4	2	2.2	1	3.7	5	1.9
Business and Industry	—	—	—	—	1	3.7	1	0.4
Military	—	—	—	—	—	—	—	—
Government	1	0.7	—	—	1	3.7	2	0.8
Other	3	2.1	2	2.2	—	—	5	1.9

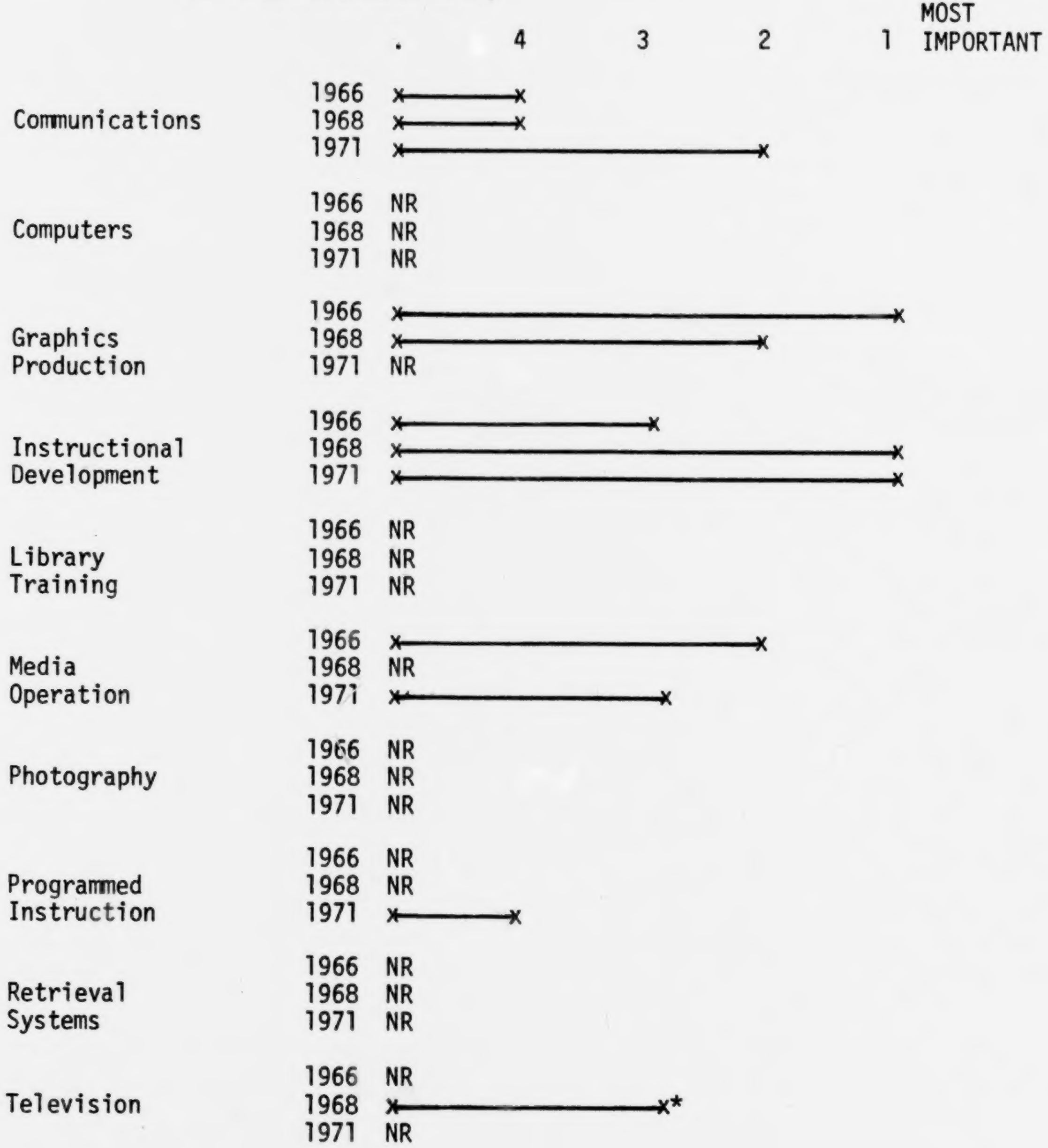
NB: Data presented in this table based on response to Question 22 of Participants' Questionnaire (Appendix C).

TABLE A-26.--Most Valuable Activities in Meeting Institute Objectives as Ranked by Institute Graduates



NB: Data presented in this table based on response to Question 23 of Participants' Questionnaire (Appendix C).

TABLE A-27.--Most Important Content Areas of Media Institutes as Ranked by Total Graduate Group



NR = NOT RANKED as one of the four most important content areas.

NB: Data presented in this table based on responses to Question 24 of Participants' Questionnaire (Appendix C).

*of TABLE A-27. Data biased due to heavier response from one institute whose emphasis was on instruction television.

TABLE A-28.--Most Important Content Areas of Media Institutes as Ranked by Two Different Graduate Groups

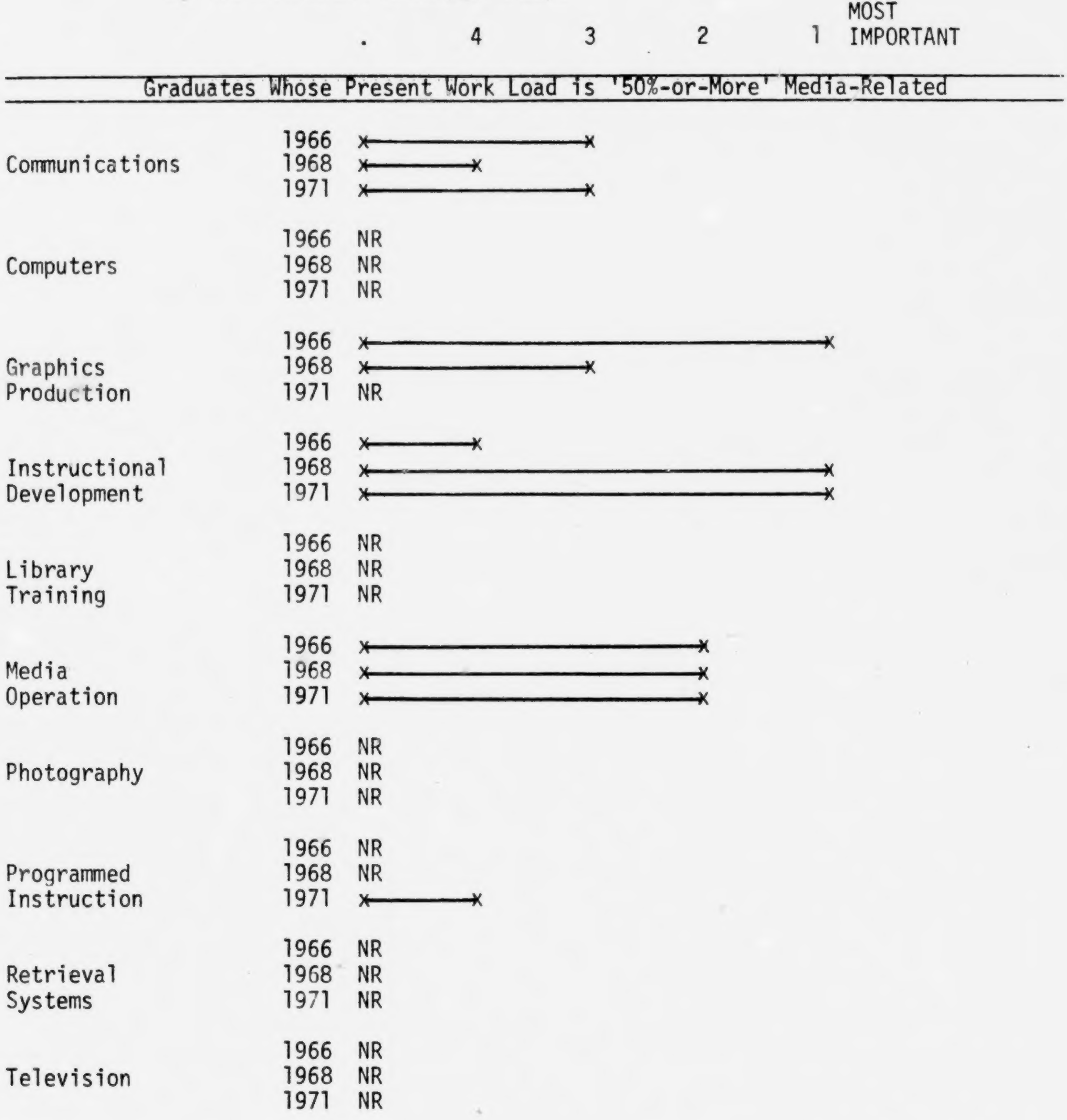


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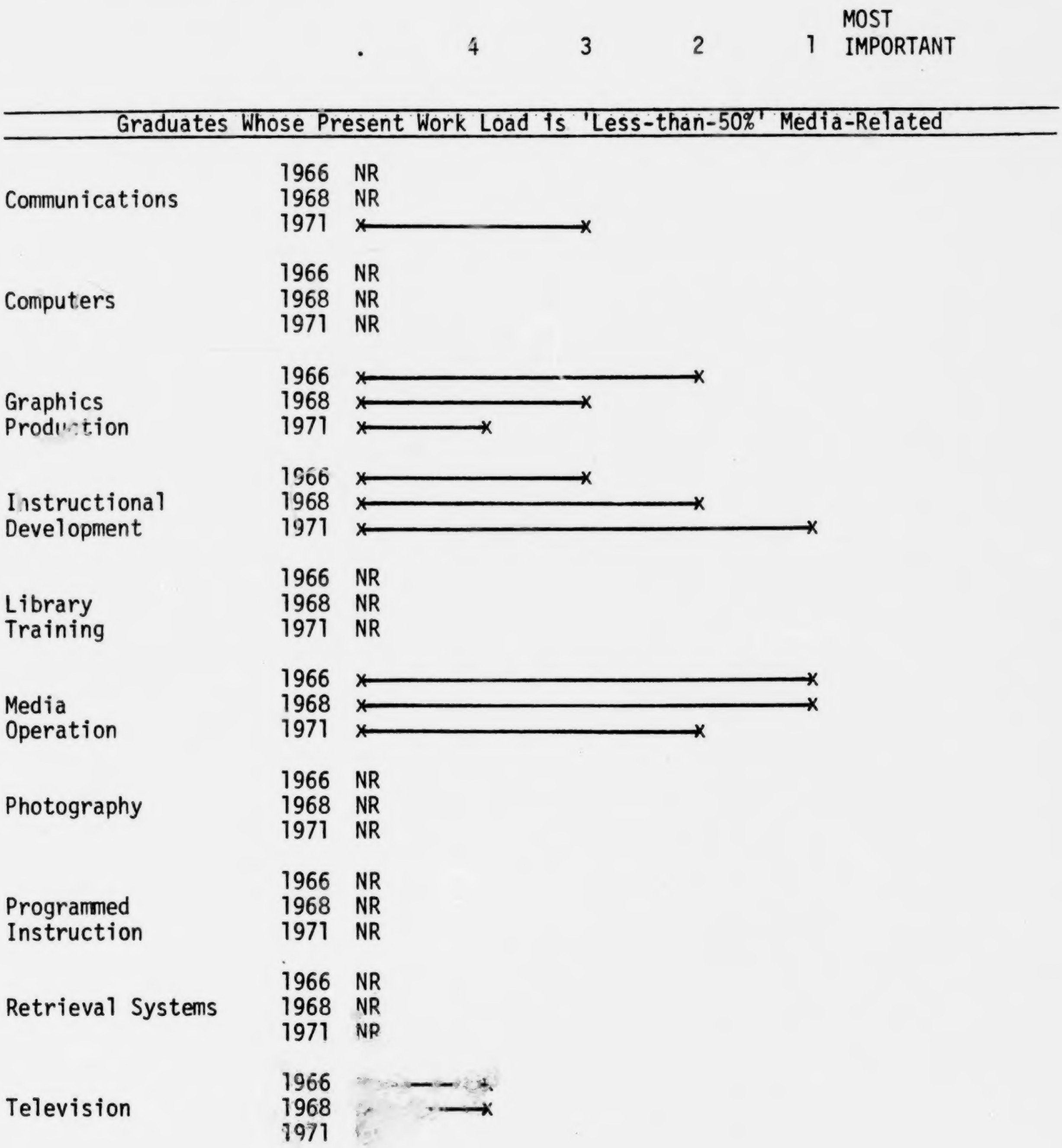
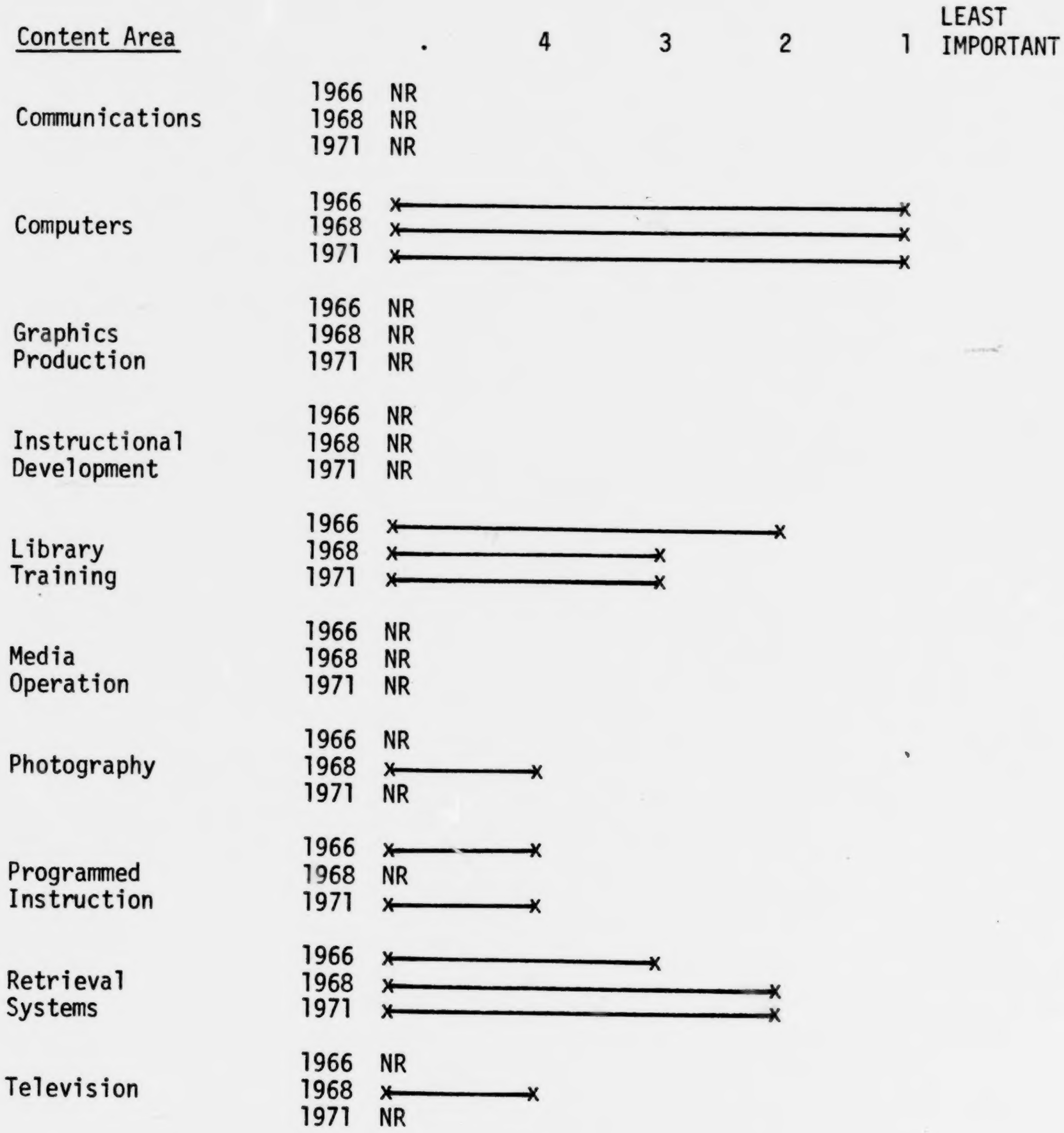
TABLE A-28.--continued



NR = NOT RANKED as one of the [illegible] most important content areas.

NB: Data presented in this table is based on responses to Question 24 of Participants' Questionnaire (Appendix C).

TABLE A-29.--Least Important Content Areas of Media Institutes as Ranked by Institute Graduates



NR = NOT RANKED as one of the four least important content areas.

NB: Data presented in this table based on responses to Question 25 of Participants' Questionnaire (Appendix C).

TABLE A-30.--Adequacy of Institute Training, in Relation to Institute Objectives, as Expressed by Institute Graduates

	1966 (N=380) No	 %	1968 (N=227) No	 %	1971 (N=54) No	 %	TOTAL (N=661) No	 %
TOTAL GRADUATE GROUP (Combination of two groups below)								
Extremely Adequate	123	32.4	60	26.4	7	13.0	190	28.7
Very Adequate	190	50.0	111	48.9	23	42.6	324	49.0
Adequate	55	14.5	42	18.6	19	35.2	116	17.6
Somewhat Adequate	8	2.1	10	4.4	5	9.3	23	3.5
Not Adequate	4	1.1	4	1.8	—	—	8	1.2
Graduates Whose Present Work Load is '50%-or-More' Media-Related								
Extremely Adequate	51	34.9	25	27.5	3	11.1	79	29.9
Very Adequate	73	50.0	42	46.1	13	48.1	128	48.6
Adequate	17	11.6	16	17.6	8	29.6	41	15.5
Somewhat Adequate	4	2.7	5	5.5	3	11.1	12	4.5
Not Adequate	1	0.7	3	3.3	—	—	4	1.5
Graduates Whose Present Work Load is 'Less-than-50%' Media-Related								
Extremely Adequate	72	30.8	35	26.5	4	13.8	111	27.9
Very Adequate	117	50.0	69	50.7	10	34.5	196	49.4
Adequate	38	16.2	26	19.1	11	37.9	75	18.9
Somewhat Adequate	4	1.7	5	3.7	2	6.9	11	2.8
Not Adequate	3	1.3	1	0.7	—	—	4	1.0

NB: Data presented in this table based on responses to Question 26 of Participants' Questionnaire (Appendix C).

TABLE A-31.--Adequacy of Institute Media Facilities and Equipment, in Relation to Learning Objectives, as Expressed by Institute Graduates

	1966 (N=377)		1968 (N=223)		1971 (N=53)		TOTAL (N=653)	
	No	%	No	%	No	%	No	%
TOTAL GRADUATE GROUP (combination of two groups below)								
Extremely Adequate	99	26.3	68	30.5	13	24.5	180	27.5
Very Adequate	168	44.6	90	40.4	16	30.2	274	41.9
Adequate	89	23.6	45	20.2	18	34.0	152	23.3
Somewhat Adequate	15	4.0	17	7.7	6	11.3	38	5.8
Not Adequate	6	1.6	3	1.3	__	__	9	1.4
Graduates Whose Present Work Load is '50%-or-More' Media-Related								
Extremely Adequate	13	10.1	28	31.1	5	19.2	64	24.4
Very Adequate	68	53.1	30	33.3	9	34.6	107	40.8
Adequate	38	29.7	21	23.3	7	26.9	66	25.2
Somewhat Adequate	7	5.5	10	11.1	5	19.2	22	8.4
Not Adequate	2	1.6	1	1.1	__	__	3	1.1
Graduates Whose Present Work Load is 'Less-than-50%' Media-Related								
Extremely Adequate	68	29.4	40	30.0	8	29.6	116	29.7
Very Adequate	100	43.3	60	45.1	7	25.9	167	42.7
Adequate	51	22.1	24	18.0	11	40.7	86	22.0
Somewhat Adequate	8	3.5	7	5.3	1	3.7	16	4.1
Not Adequate	4	1.7	2	1.5	__	__	6	1.5

NB: Data presented in this table based on responses to Question 27 of Participants' Questionnaire (Appendix C).

TABLE A-32.--Institutional Setting Most Beneficial in Preparing Graduate for Current Job

	1966 (N=237)		1968 (N=134)		1971 (N=29)		TOTAL (N=400)	
	No	%	No	%	No	%	No	%
TOTAL GRADUATE GROUP								
Technical Institute	—	—	—	—	—	—	—	—
Community College	1	9.4	—	—	—	—	1	0.2
Four-year College	27	11.4	20	14.9	2	6.9	49	12.2
Graduate School	68	28.7	50	37.3	7	24.1	125	31.2
Media Institute	93	39.2	29	21.6	8	27.6	130	32.5
On-the-Job	45	19.0	32	23.9	11	38.0	88	22.0
Other	3	1.3	3	2.2	1	3.4	7	1.7
Graduates Whose Present Work Load is '50%-or-More' Media-Related								
Technical Institute	—	—	—	—	—	—	—	—
Community College	—	—	—	—	—	—	—	—
Four-year College	4	—	1	—	—	—	5	3.4
Graduate School	21	—	15	—	4	—	40	27.6
Media Institute	45	—	15	—	6	—	66	45.5
On-the-Job	16	—	12	—	6	—	34	23.4
Other	—	—	—	—	—	—	—	—

NB: Data presented in this table based on responses to Question 28 of Participants' Questionnaire (Appendix C). Many respondents checked more than one item in answer to this question--all of which responses had to be discounted for purposes of this tabulation. Thus, the response shown in this table is low.

TABLE A-33.--Content Areas Graduates Feel are Critical to Their Job Performance

Content Areas (in order of frequency)	Number of Graduates Writing in Item
Production	47
Instructional Development	25
Media Utilization	24
Administration of Media Programs (budget, personnel)	20
Television (CCTV, CATV, ITV, ETV)	17
Communication Techniques and Theory	15
Media Operation	14
Update for New Innovations	14
Organizational Management	12
Individualized Instruction	11
Instructional Design	11
Basic Library Training	10
Evaluation of Instructional Programs	10
New Educational Technology Trends	9
Equipment Repair/Maintenance	8
Evaluation of Hardware and Software	7
Information Retrieval Systems	7
Inservice Programs for Faculty	7
Organization of Instructional Materials Center	7
Photography	7
Learning Theories	6
Selection of Hardware and Software	6
Computer Assisted Instruction (Application of Computers to Education)	4
Subject Content Areas	4
Programed Instruction	3
Systems Approach	3
Behavioral Objectives	2
Facilities Planning for Media Programs	2
Learning Strategies	2
Retrieval Systems	2
TV Production	2
Information Dissemination	1
Paraprofessional Training	1

NB: Data presented in this table based on responses to Question 29 of Participants' Questionnaire (Appendix C).

TABLE A-34.--Graduates' Recommendations for Future Media Institute Emphasis

Content Areas (in order of frequency)	Number of Graduates Writing in Item
Instructional Development	36
Production	34
Television (CCTV, CATV, ITV, ETV)	26
Media Utilization	23
Individualized Instruction	19
Inservice Programs for Faculty	17
Administration of Media Programs (Budget, Personnel)	14
Organization of Instructional Materials Centers	14
Update for New Innovations	12
Computer Assisted Instruction (Application of Computers to Education)	11
Organizational Management	10
New Educational Technology Trends	9
Communication Techniques and Theory	8
Evaluation of Instructional Programs	8
Instructional Design	8
Systems Approach	7
Basic Library Training	6
Media Specialist Role	6
Programed Instruction	6
Information Retrieval Systems	5
Photography	5
Behavioral Objectives	4
Selection of Hardware and Software	4
Equipment Repair/Maintenance	3
Learning Theories	3
Retrieval Systems	3
Facilities Planning for Media Programs	2
Media Operations	2
Paraprofessional Training	2
Evaluation of Hardware and Software	1
Subject Content Areas	1
TV Production	1

NB: Data presented in this table based on response to Question 30 of Participants' Questionnaire (Appendix C).

TABLE A-35.--Participant/Graduates' General Comments

NB: Participant/graduates were given open-ended space for general comments regarding the educational media institute experience. Included in this table is a representative sampling of comments.

The best training and preparation for the use of media I have ever had. Was better than one full year of college training.

Had you asked me as soon as I returned from the Institute, I wouldn't have considered it (the institute) as valuable as I do now since I have had time to apply what I learned, because I didn't realize how much it would benefit me until I'd been put to the test.

Media institute did not permit individualization (pupils) relative to district (school) needs.

The outcome of the Media Institute was to initiate a plan of action applicable to each participant's experiential level. My plan of action within my school led to recognition from the District and has helped immeasurably in my career in the Media field at the District level.

I attended the Media Institute during the summer of 1966 and felt there were far too many hours spent in the classroom.

One of my most outstanding experiences was a practicum in which I was permitted to have much 'hands on' experience.

I have chosen to remain in the classroom. But in many ways I feel I can more directly affect the lives of children and media plays a large part in this endeavor.

I am returning to administration. I feel I can be a prime factor in creating an operational media program thanks to the training of the institute.

Before an institute is conducted, the state legislature should be 'sold' on the importance of the program so that the Department of Education can be funded especially for these positions.

Although not presently employed directly in the Media area as such, the Media Institute has helped me immeasurably in helping teachers select, purchase and utilize both equipment and materials.

My media training has made it possible for me to develop and operate a county-wide media center.

The institute was great. I came home all fired up. The problem is to get the Administration 'all fired up'.

Concerning institutes--keep them available in all educational disciplines.

APPENDIX B

Tables B-1 through B-20

TABLE B-1.--Number of Educational Media Institutes Conducted (1965-71)[1]

	1965	1966	1967	1968	1969	1970	1971	TOTAL
Short Term[2]	36	37	34	20	10	2	3	142
Long Term[3]	0	0	0	1	7	10	13	31
Totals	36	37	34	21	17	12	16	173

[1] Data based on the annual institute program announcements of the U.S. Office of Education.

[2] Short Term institutes were conducted in three months or less.

[3] Long Term institutes were conducted in four months or more.

TABLE B-2.--Long and Short Term Educational Media Institutes Represented in Response of Institute Directors to LTI Questionnaire

	1965	1966	1967	1968	1969	1970	1971	Total
Short Term[4]	9	11	16	12	4	2	0	53
Long Term[5]	0	0	0	1	2	5	6	15
Totals	9	11	16	13	6	7	6	68

NB: Data presented in this table based only on responses to Question 3 of Directors Questionnaire (Appendix D). One of the 69 directors completing the questionnaire did not respond to Question 3.

[4] Short Term institutes were conducted in three months or less.

[5] Long Term institutes were conducted in four months or more.

TABLE B-3.--Federal Support Dollars Reported by 69 Institute Directors

	1965 (N=9)	1966 (N=11)	1967 (N=16)	1968 (N=14)	1969 (N=6)	1970 (N=7)	1971 (N=6)	TOTAL (N=69)
TOTAL	$506,251	619,465	982,105	624,168	360,102	538,522	413,631	4,044,235
Average per Institute	63,281	61,947	70,150	56,743	61,220	76,932	68,939	58,612

NB: Data presented in this table based on responses to Question 4 of the 69 directors completing the Directors Questionnaire (Appendix D).

TABLE B-4.--Institutional Settings From Which Participants Came for Institute Training[1]

	1965		1966		1967		1968		1969		1970		1971		TOTAL	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
Elementary/ Secondary	362	93.8	335	72.8	438	75.5	382	85.8	381	100	169	26.4	55	68.7	2122	82.4
County/ District Agency	23	5.9	65	14.1	15	2.6	13	2.9	--	--	54	8.4	12	15.0	182	7.1
State Educational Agency	--	--	4	.9	12	2.5	40	9.0	--	--	1	.1	2	2.5	59	2.3
Community College/Technical Institute	--	--	1	.2	6	1.2	2	.4	--	--	2	.3	--	--	11	.4
College/ University	--	--	53	11.5	92	19.2	4	.9	--	--	11	1.7	7	8.7	167	6.5
Business/ Industry	--	--	2	.4	--	--	4	.9	--	--	1	.1	1	1.2	8	.3
Military	--	--	--	--	1	.2	--	--	--	--	--	--	--	--	1	.0
Government	--	--	--	--	1	.2	--	--	--	--	402[2]	62.8	2	2.5	7	.3
Other	1	.2	--	--	15	.3	--	--	--	--	--	--	1	1.2	17	.7

---

[1] Data presented in this table based on 69 institute directors response to Question 6 of the Directors Questionnaire (Appendix D).

[2] This number reflects four hundred government personnel who were trained at one institute.

TABLE B-5.--Percent of Time in Institute Program Devoted to Training for Particular Functional Competencies

	1965	1966	1967	1968	1969	1970	1971	TOTAL
Research	3.4%	6.0%	4.3%	2.8%	2.0%	9.0%	12.3%	5.1%
Evaluation	7.9%	11.6%	8.5%	14.9%	13.6%	17.0%	10.3%	11.5%
Design	8.1%	15.9%	9.1%	15.6%	17.0%	14.0%	26.2%	14.1%
Production	23.1%	23.5%	20.7%	28.9%	26.0%	18.0%	15.7%	22.9%
Logistics	8.1%	7.4%	6.8%	3.7%	2.4%	6.0%	4.7%	5.8%
Utilization	26.9%	15.1%	23.5%	18.2%	16.0%	13.0%	14.3%	19.1%
Organization Management	11.3%	10.3%	7.9%	6.5%	5.0%	4.0%	7.8%	7.9%
Information Management	5.5%	5.0%	4.8%	5.4%	11.0%	4.0%	4.7%	5.5%
Personnel Management	4.5%	4.4%	5.6%	3.8%	5.0%	3.0%	4.7%	4.5%
Other*	--	--	.7%	.8%	2.0%	12.0%	--	1.6%

NB: Data presented in this table based on the mean average of responses to Question 7 of the 69 directors completing the Directors Questionnaire (Appendix D).

*This category reflects the 'no responses' to Question 7. Many institute directors emphasized that due to a lapse of time their responses were at best a 'guess'.

TABLE B-6.--Percent of Time in Institute Program Devoted to Training for Particular Educational Media Responsibility Levels

	1965	1966	1967	1968	1969	1970	1971	TOTAL
Directive/ Administrative	59.3%	58.8%	55.5%	37.5%	7.0%	13.6%	29.2%	42.2%
Professional	34.4%	33.5%	35.3%	60.8%	77.6%	78.4%	65.7%	50.7%
Artistic/ Technical	5.0%	7.8%	8.3%	1.9%	12.0%	6.4%	5.0%	6.2%
Clerical/ Manual	1.3%	--	--	--	3.0%	--	--	.4%
Other*	--	--	.7%	--	--	1.4%	--	.3%

NB: Data presented in this table based only on the mean average of responses to Question 8 from the 69 institute directors completing the Directors Questionnaire (Appendix D).

*This category reflects the 'no responses' to Question 8. Many institute directors emphasized that due to a lapse of time their responses were at best a 'guess'.

TABLE B-7.--Percent of Time in Institute Program Devoted to Particular Training Activities

	1965	1966	1967	1968	1969	1970	1971	TOTAL
Scheduled Classroom Lectures	35.0%	34.5%	29.5%	29.5%	14.0%	18.4%	28.8%	28.6%
Guest Lectures	12.5%	8.6%	11.1%	10.4%	12.0%	9.4%	9.2%	10.4%
Self-Instruction Programs	8.1%	3.2%	9.1%	8.5%	12.0%	9.6%	7.2%	8.0%
Production Labs	28.8%	23.0%	22.0%	29.0%	30.0%	14.6%	21.5%	24.7%
Field Experience	5.6%	4.7%	9.4%	7.3%	23.0%	5.6%	23.7%	9.7%
Simulation Activities	3.1%	1.4%	6.9%	2.7%	7.0%	9.7%	3.0%	4.6%
Professional Experiences [1]	1.3%	3.6%	5.1%	--	2.0%	1.0%	.8%	2.2%
Other[2]	5.6%	21.2%	1.3%	12.0%	--	31.9%	6.0%	12.4%

NB: Data presented in this table based only on the mean average of responses to Question 9 of the 69 directors completing the Directors Questionnaire (Appendix D).

[1] e.g., national conventions, organization of local chapters of professional associations, etc.

[2] This category reflects the 'no responses' to Question 9. Many institute directors emphasized that due to a lapse of time their responses were at best a 'guess'.

TABLE B-8.--Most Valuable Training Activities in Meeting Institute Objectives, as Ranked by Institute Directors

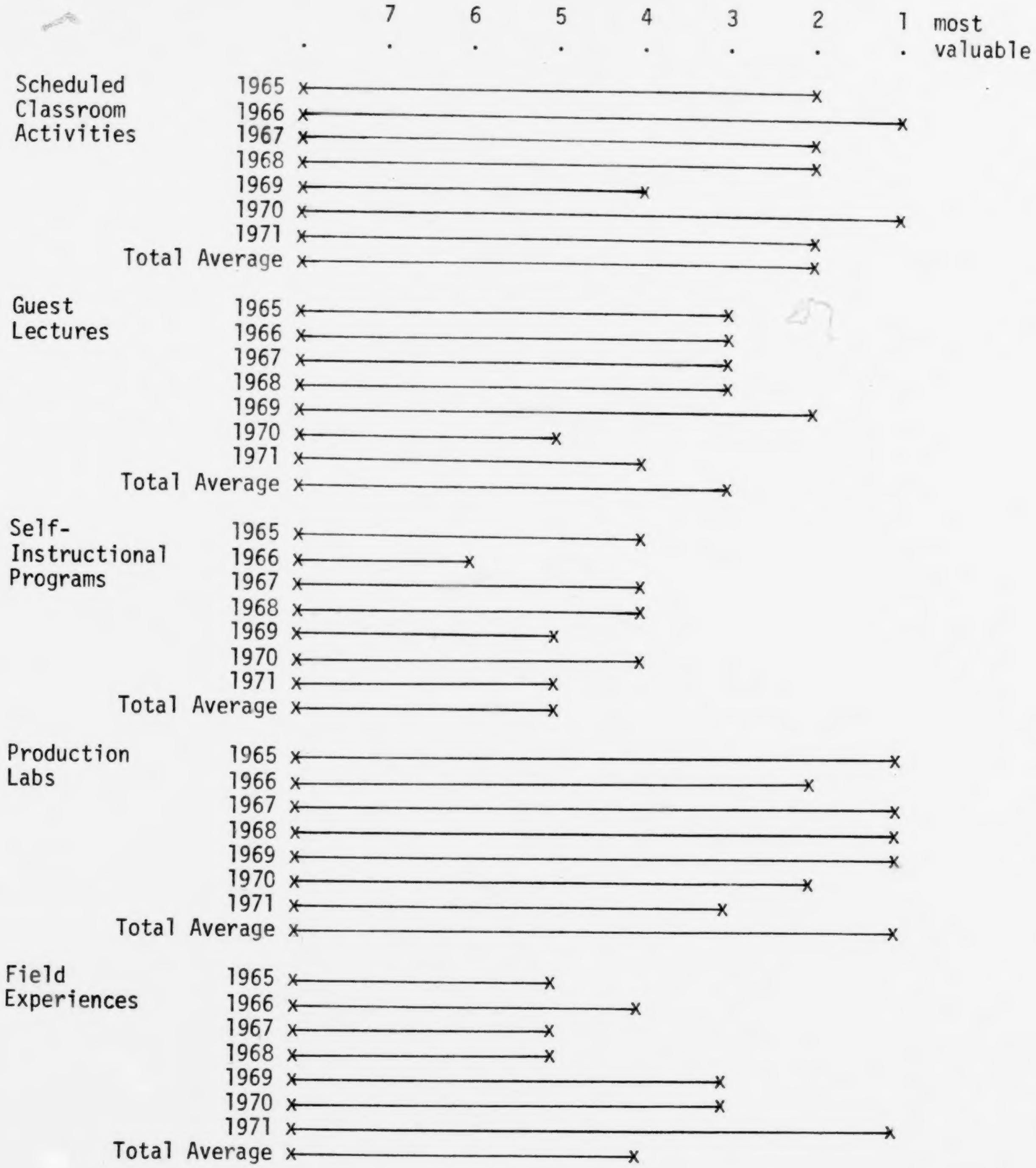
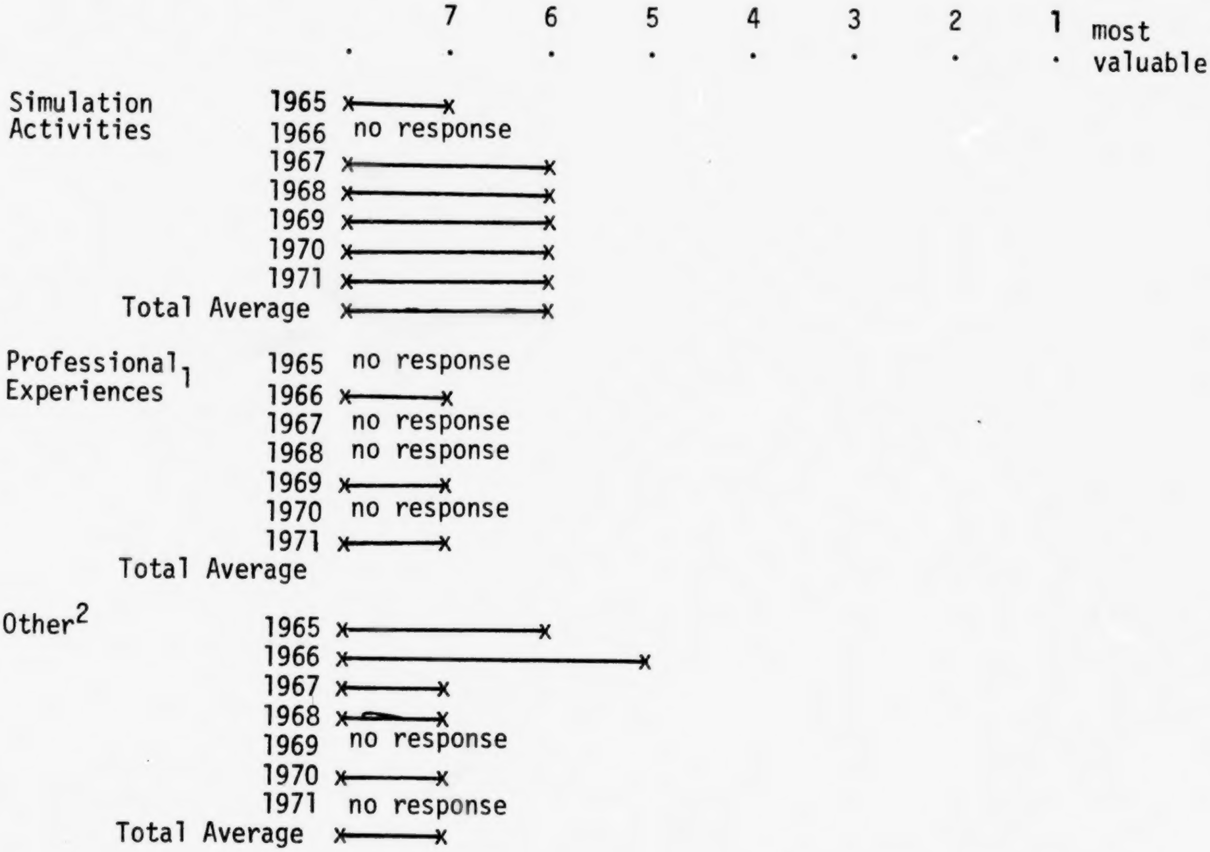


TABLE continued on next page

TABLE B-8.--continued

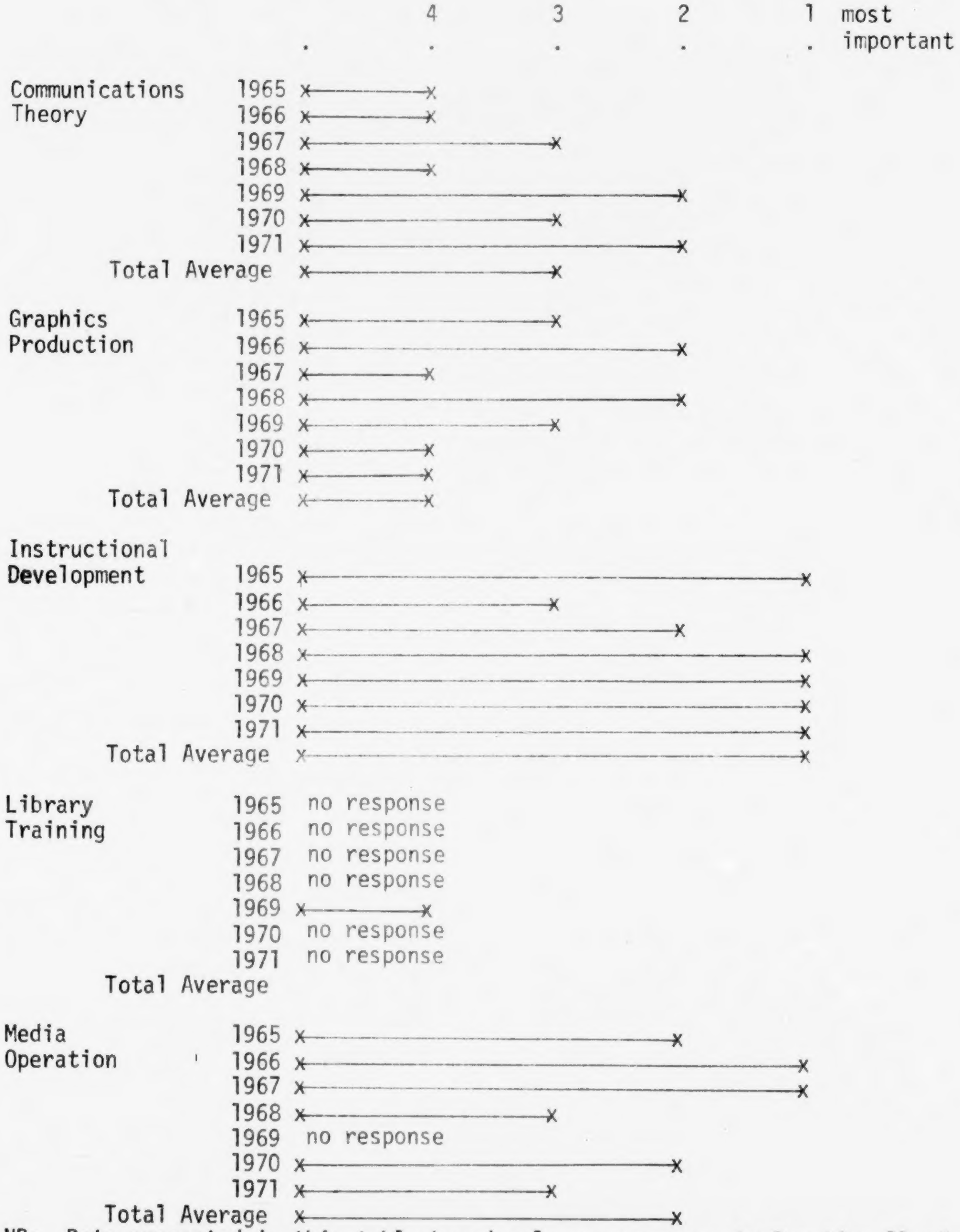


NB: Data presented in this table based only on responses to Question 10 of the 69 directors completing the Directors Questionnaire (Appendix D).

[1] e.g., national conventions, organization of local chapters of professional associations, etc.

[2] Responses to this item included: Demonstrations, consultations with staff and small group instruction, evaluation of childrens television programming, informal meal-time discussions.

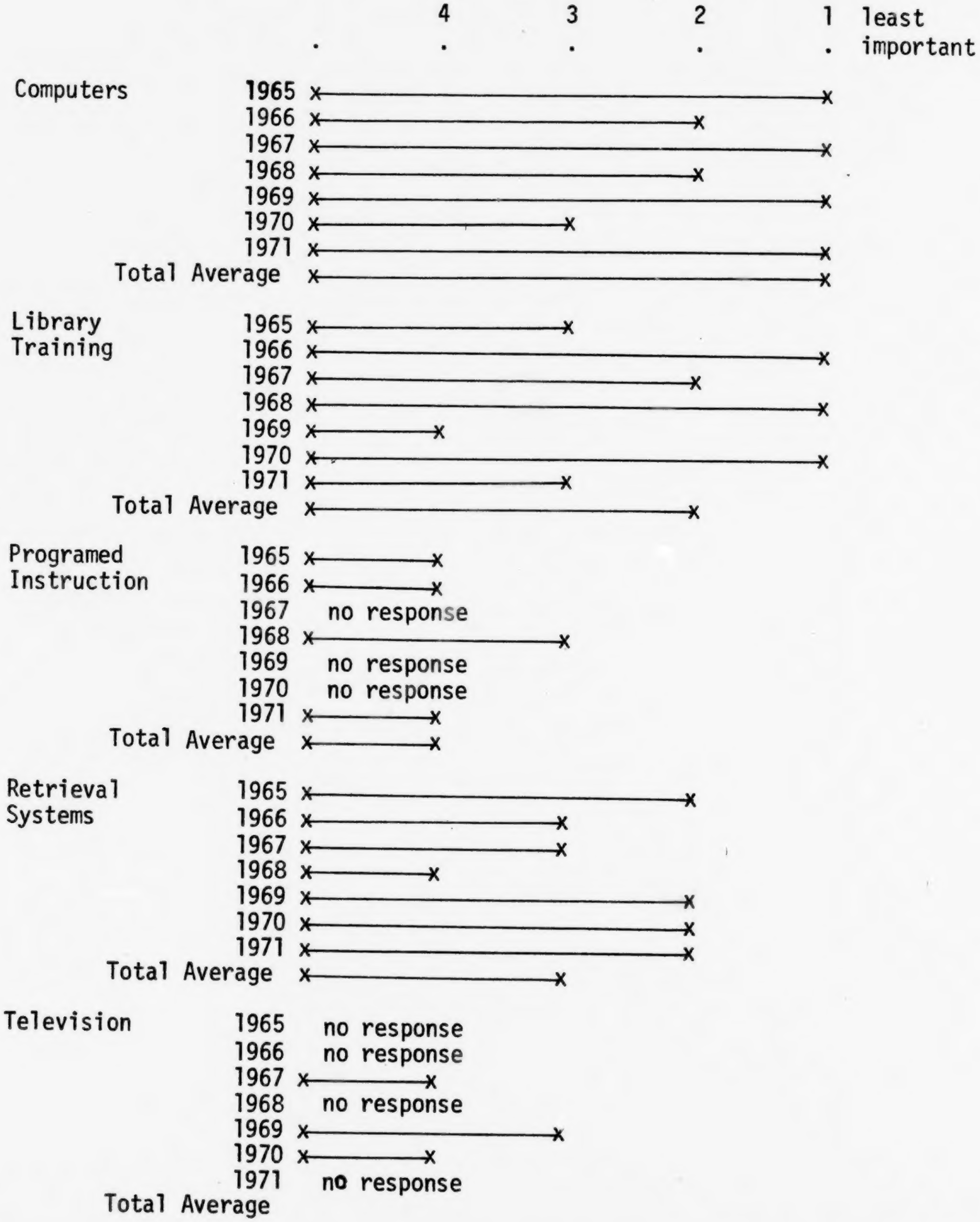
TABLE B-9.--Content Areas Which Best Characterize Institute Training, as Ranked by Instituted Directors



NB: Data presented in this table based only on responses to Question 11 of the 69 directors completing the Directors Questionnaire (Appendix D).

In the Questionnaire, other possible choices for Question 11 (to which there were no responses at all) were: computers, photography, programed instruction, retrieval systems, television, and an 'other' category.

TABLE B-10.--Content Areas Least Important in Institute Training, as Ranked by Institute Directors



NB: Data presented in this table based only on the responses to Question 12 of the 69 directors completing the Directors Questionnaire (Appendix D).

In the Questionnaire, other possible choices for Question 12 (to which there were no responses at all) were: communications, graphics production, instructional development, media operation, photography and an 'other' category.

TABLE B-11.--Type of Commitment from Participants' School System as Evidence of Support for Media Institute Training

	1965	1966	1967	1968	1969	1970	1971	TOTAL
RELEASE TIME for media on return to school system	64.5%	50.8%	17.1%	40.8%	79.9%	72.4%	27.9%	55.3%
MONETARY SUPPORT for participant during institute	12.7%	1.5%	20.7%	1.4%	1.3%	11.8%	1.5%	9.7%
NEW POSITION for institute graduate	16.6%	35.5%	10.5%	4.4%	11.1%	8.8%	29.2%	16.2%
RELEASE TIME during participants institute training	2.3%	3.1%	.9%	11.6%	1.9%	--	40.0%	4.6%
NO COMMITMENT	3.9%	9.2%	24.6%	19.2%	6.4%	7.1%	1.5%	14.1%

NB: Data presented in this table based only on the responses to Question 13 of the 69 directors completing the Directors Questionnaire (Appendix D). Percents are based on the mean average of responses.

TABLE B-12.--Long Term Change at Host Institution brought about by Media Institute, as reported by Institute Directors

	1965 (N=9)	1966 (N=11)	1967 (N=16)	1968 (N=14)	1969 (N=6)	1970 (N=7)	1971 (N=6)	TOTAL (N=59)
Waiver of Tuition for graduates desiring further academic work at same institution	1	0	1	0	1	0	1	4
Host institution sponsored similar institutes	2	0	6	6	3	2	1	20
Faculty donation of time for similar media training	3	0	4	4	0	1	3	18
Expansion of formal academic media program	4	9	11	9	1	1	4	39
Increased enrollment (tuition-paying) in academic media program	4	8	8	9	0	2	4	35
Additional space or equipment procured	5	10	10	9	4	3	3	44
Increase in staff or facilities	4	7	6	5	3	2	4	31
Increase in budget for media program	3	6	6	5	3	1	2	26
National Recognition	7	9	11	8	3	4	4	46
Other*	1	0	1	2	0	2	1	7

NB: Data presented in this table based only on the responses to Question 14 of the Directors Questionnaire (Appendix D).

* Responses written-in under 'other' included:

"Professional staff growth"
"Closer liaison in mutual program between media and architecture personnel"
"Instituted a plan for collaboration of Library Science and Educational Media cooperative degree"
"Design for Problem-Solving of local school problems achieved"

TABLE B-13.--Institutional Setting from which Institute Directors received requests for Media Specialist to fill Job Vacancies, at time of Institute

	1965 (N=9)	1966 (N=11)	1967 (N=16)	1968 (N=14)	1969 (N=6)	1970 (N=7)	1971 (N=6)	TOTAL (N=69)
Elementary/Secondary	40.5%	14.1%	24.8%	12.2%	27.6%	27.3%	28.2%	23.9%
County/District Agency	14.4%	15.2%	9.0%	8.5%	24.0%	5.3%	17.5%	12.1%
State Educational Agency	5.6%	2.0%	1.0%	3.7%	--	18.0%	7.5%	4.6%
Community College/ Technical Institute	6.9%	3.6%	5.2%	3.5%	2.0%	2.4%	3.3%	4.1%
College/University	15.6%	10.6%	5.9%	2.8%	6.0%	16.4%	6.7%	8.5%
Business/Industry	2.5%	.9%	.3%	--	--	.7%	.8%	.7%
Military	1.9%	--	--	--	--	--	--	.2%
Government	.6%	.9%	.3%	--	--	1.4%	--	.5%
Other*	12.0%	52.0%	53.0%	68.6%	40.0%	27.9%	35.5%	45.4%

TABLE B-14.--Responsibility Level for which there were Media Specialist Job Vacancies at time of Institute (cf TABLE B-13)

	1965 (N=9)	1966 (N=11)	1967 (N=16)	1968 (N=14)	1969 (N=6)	1970 (N=7)	1971 (N=6)	TOTAL (N=69)
Administrative/Directive	55.1%	27.2%	46.4%	18.0%	6.0%	18.6%	32.2%	31.1%
Professional	27.9%	27.2%	13.3%	28.0%	36.0%	31.4%	60.3%	28.4%
Artistic/Technical	4.1%	--	--	--	18.0%	9.3%	7.2%	3.6%
Clerical/Manual	--	--	--	--	--	1.4%	--	.2%
Other*	12.0%	45.4%	40.0%	54.0%	40.0%	39.0%	--	36.3%

NB: Data presented in TABLES B-13 and B-14 is based on the mean percent of responses to Questions 15 and 16, respectively, of the Directors Questionnaire (Appendix D).

*Data presented under 'other' reflects those not responding to Questions 15 and 16, respectively. Many directors had no records of such employer requests. A few directors referred us to other departments within their universities.

TABLE B-15.--Institutional Setting from which Institute Directors were receiving requests for Media Specialists to fill Job Vacancies, School Year 1972-73. (cf TABLE B-13)

Year director conducted institute:	1965 (N=9)	1966 (N=11)	1967 (N=16)	1968 (N=14)	1969 (N=6)	1970 (N=7)	1971 (N=6)	TOTAL (N=69)
Elementary/Secondary	24.8%	29.5%	29.8%	29.5%	19.8%	36.0%	1.7%	26.3%
County/District Agency	16.6%	15.0%	9.3%	12.3%	--	3.3%	33.2%	12.6%
State Educational Agency	.6%	2.3%	2.1%	5.2%	--	10.4%	4.0%	3.5%
Community College/ Technical Institute	6.9%	13.2%	11.7%	9.8%	--	4.7%	15.0%	8.5%
College/University	31.6%	20.7%	19.2%	16.5%	--	27.1%	17.5%	19.7%
Business/Industry	6.9%	1.2%	1.5%	8.1%	--	1.4%	1.7%	3.3%
Military	--	--	.1%	2.0%	--	--	.8%	.5%
Government	--	--	.1%	.6%	--	--	.8%	.2%
Other*	15.4%	18.0%	26.0%	15.8%	80.0%	16.1%	14.7%	25.0%

TABLE B-16.--Responsibility Level for which there were Media Specialist Job Vacancies, School Year 1972-73 (cf TABLES B-14 and B-15)

Year director conducted institute:	1965 (N=9)	1966 (N=11)	1967 (N=16)	1968 (N=14)	1969 (N=6)	1970 (N=7)	1971 (N=6)	TOTAL (N=69)
Administrative/Directive	55.9%	32.2%	44.7%	31.8%	--	21.4%	34.2%	34.5%
Professional	39.6%	34.0%	31.6%	54.4%	12.0%	32.9%	49.0%	37.8%
Artistic/Technical	4.1%	6.4%	3.0%	9.6%	8.0%	8.6%	--	5.7%
Clerical/Manual	1.1%	--	.3%	--	--	--	--	.2%
Other*	--	27.0%	20.0%	4.0%	80.0%	36.7%	16.0%	20.8%

NB: Data presented in TABLES B-15 and B-16 is based on the mean percent of responses to Questions 17 and 18, respectively, of the Directors Questionnaire (Appendix D).

*Data presented under 'other' reflects those not responding to Questions 17 and 18, respectively. Many directors had no records of such employer requests. A few directors referred us to other departments within their universities.

TABLE B-17.--Exchange of Instructional Materials by Institute Directors

	1965 (N=9)	1966 (N=9)	1967 (N=16)	1968 (N=13)	1969 (N=6)	1970 (N=7)	1971 (N=6)	TOTAL (N=66)
Yes, I did exchange materials	4	3	9	3	3	3	3	28 (42.4%)
No, I did not exchange materials	5	6	7	10	3	4	3	38 (57.6%)

NB: Data presented in this table based only on responses to Question 19 of Directors Questionnaire (Appendix D). (Three directors did not respond to this question.)

TABLE B-18.--Content Areas in which Directors would like Additional Information

Content Area	Number of times response was written in
Instructional Development	7
Evaluation	4
Research Methodology	4
Systems Approach	3
Computer Applications for Education	2
Games and Simulation	2
Individualized Instruction, methods for	2
Production	2
Telecommunications (new technology, cable, etc.)	2
Update on U.S. Office of Education activities	2
Update on Educational Technology	2
Field Experience Internships	1
Needs Assessment	1
Programed Instruction	1
Visual Literacy	1

NB: Data presented in this table is a tabulation of responses from directors for all years, to Question 20 of Directors Questionnaire (Appendix D).

TABLE B-19.--New Content and Directions for Media Institutes Suggested by Media Institute Directors from Years 1965-71.

Content Area	Number of times response was written in
Instructional Development	15
Systems Approach	5
Evaluation	3
Production	3
Computer Applications for Education	2
Games and Simulation	2
Individualized Instruction, methods for	2
Management Techniques	2
Research Methods	2
Information Systems	1
Human Relations Skills	1
Instructional Materials Centers (organ/mangt)	1
Learning Theory	1
Library/Audiovisual Integration	1
Telecommunications (new technology, cable, etc.)	1
Training Administrators for Change	1
Visual Literacy	1

NB: Data presented in this table is a tabulation of responses from directors for all years to Question 21 of Directors Questionnaire (Appendix D).

TABLE B-20.--Directors General Comments

NB: The institute directors were given open-ended space for their general comments related to the educational media institute program. The quotations presented in this table are a cross-section of responses.

...It is interesting to note that the pattern of the NDEA institute has been followed for the current institute planned for teachers of the deaf, including stipend and materials costs. On the basis of our success with teachers of the deaf, we were asked to establish at the University of Nebraska a Media Center for the Deaf. The Midwest Regional Media Center for the Deaf began in 1966 and has operated to this date...

> The institute had a marked effect upon the employment of media specialists in the surrounding region of the state. Many more school districts now employ media specialists on a full or part-time basis than formerly was true. The institutes gave a tremendous boost to our graduate programs and most of the jobs currently available in this area are held by people who were in our institute and then went on to complete their degree work here at the University or completed our program without having any relation to the institute.

Our media institute brought more prestige to my department than anything we have done on campus. My administration is much more cooperative since the institute. I feel this is a direct result of the institute. We begin this summer (1973) offering an M.A. in media.

> As a reult of this and other institutes held on our campus, the graduate program in library media has become a reality. We currently have 199 graduate students enrolled in our program based primarily on the identifiable needs for people trained in this area. Although we graduate forty to fifty people per year, we have been unable to furnish the names of qualified graduates for positions of library media director in public schools, school districts, colleges and universities. State department audiovisual personnel by the same token, are in the same process of bringing together the audiovisual and library activities at the state level into a unified whole. It has been extremely gratifying to us in recognizing over 260 graduates from our institutes from all corners of the globe who have carried the good word about our program and have sent us hundreds of applicants who are willing to pay for their education in this vital field.

The demand for educators who have earned doctorates and who are highly competent in Instructional Development and Technology is increasing very rapidly. To meet this demand it will be necessary to recruit and train substantially larger numbers of Instructional Development specialists than are being currently produced. This means that the financial support for this particular professional training must be greatly increased.

TABLE B-20.--*continued*

> From feedback and responses by both those in this and the 1965 institutes and their administrators, I believe the development of media programs was moved forward significantly. Many of these participants took the five-year media program plans they developed during these institutes back to their administrations and received excellent assistance, additional staff, extra facilities, etc. to expand and upgrade their media programs.

I believe that we have worn out the current mode of leadership training. I believe also that we are now in an era of consolidating gains and, having learned the identification of potential leaders, are in a position to retrain these people in terms of specific competencies.

APPENDIX C

Responses from 664 educational media institute participants are presented in Tables A-1 through A-35, Appendix A.

Presented in this appendix is a copy of the questionnaire instrument and accompanying cover letter which were sent to the institute participants. About 43 percent of the participants responded immediately to the first mailing. Because of a time constraint, a second mailing was not feasible.

The intent of this questionnaire mailing was to provide an opportunity for each participant to contribute follow-up data relative to institute training and his/her present media functions.

Leadership Training Institute

lti

November 29, 1972

Participant
Media Specialist Institute
1966, 1968 or 1971

Dear Participant:

The Leadership Training Institute is conducting a retrospective analysis of educational media training institutes. Our questionnaire seeks information about the NDEA or EPDA media institute you attended in 1966, 1968 or 1971. The purpose is not to evaluate each institute but to collect data on all educational media institutes. Data furnished by you, along with a document search, will be used to provide information for planning and upgrading future educational media institutes as well as developing an operational time/activity model of past and present educational media institutes.

There is a number in the upper right corner of the first page of your questionnaire. This number is for follow-up purposes only. Your response will be held in strict confidence by the staff.

The value of this study depends on the questionnaires being completed and returned. We urge you to take approximately 30 minutes to complete the enclosed questionnaire. When you have completed the questionnaire, use the enclosed, self-addressed, stamped envelope for mailing. Your early attention will be greatly appreciated.

Sincerely,

Desmond P. Wedberg

Desmond P. Wedberg
Director

Enclosures

DPW/dms

Educational Technology Center, College of Education, University of Maryland, College Park, Maryland 20742, Telephone 301 454 4017

Supported by a grant from the National Center for Educational Technology, U.S. Office of Education

# QUESTIONNAIRE
for
MEDIA INSTITUTE PARTICIPANTS
1966, 1968, and 1971

lti

Retrospective Analysis of

Media Specialist Training (1965-71)

11/72

1. Sex: ☐ Male ☐ Female

2. Number of years in your present Media work assignment.

☐ 1-2
☐ 3-4
☐ 5-6
☐ 7-8
☐ 9-10
☐ 11-12
☐ 13-14
☐ 15-16
☐ 17 and over

3. Number of years in Media-related work.

☐ 1-2
☐ 3-4
☐ 5-6
☐ 7-8
☐ 9-10
☐ 11-12
☐ 13-14
☐ 15-16
☐ 17 and over

4. What was the highest degree you held at the time of the institute?

☐ High School Graduation
☐ Associate Degree
☐ Bachelors Degree
☐ Masters Degree
☐ Doctorate
☐ Specialist
☐ Other

5. What is the highest degree you presently hold?

☐ High School Graduation
☐ Associate Degree
☐ Bachelors Degree
☐ Masters Degree
☐ Doctorate
☐ Specialist
☐ Other

6. What was your age at the time of the institute?

☐ 25 or less
☐ 26-30
☐ 31-35
☐ 36-40
☐ 41-45
☐ 46-50
☐ 51-55
☐ 56 or more

7. What is your present job title? ______________________________

8. How do you categorize your present responsibilities?

__________% Media

__________% Other (e.g., classroom teacher, supervisor)

Total 100%

9. How do you categorize your present media responsibilities? (Please indicate the relative percentage of time devoted to each area)

________% Directive-Administrative
(The Directive-Administrative grouping includes job activities that represent top administrative and management responsibilities which are necessary to control media operations.)

________% Professional
(The Professional grouping includes job activities that are responsible to work directly in the use of media with learners and learning problems.)

________% Artistic-Technical
(The Artistic-Technical grouping includes job activities that are responsible to work directly with media in support of the professional type activities, e.g., graphics artist, photographer, etc.)

________% Clerical-Manual
(The Clerical-Manual grouping refers to job activities that are necessary to support all other media-related jobs.)

Total 100%

10. What percentage of your media responsibilities are devoted to the following functions?

________% Research
(Research is defined: To generate and test theory, develop products and the methodology of instructional media.)

________% Evaluation
(Evaluation is defined: To provide information to those individuals responsible for instructional programs to allow them to make appropriate adaptive decisions regarding the management, development, and utilization of media in instruction.)

________% Design
(Design is defined: To translate theory and empirical evidence about learners, subject matter, mediating forms, settings and techniques into instructional systems specifications.)

________% Production
(Production is defined: To make specific instructional products by following design specifications and artistic standards.)

________% Logistics
(Logistics is defined: To provide acquisition, storage, supply and maintenance support to the appropriate operations and management of media in instruction.)

________% Utilization
(Utilization is defined: To employ media in an instructional setting for the purpose of bringing about desired specific changes in learners.)

________% Organizational Management
(Organizational Management is defined: To plan, establish and maintain the organizational structure necessary to support the activities required in the operations and management of media services.)

________% Information Management
(Information Management is defined: To plan, establish and maintain the means for supplying essential information, both internal and external, necessary to the operations and management of a media service.)

________% Personnel Management
(Personnel Management is defined: To provide qualified and adequately prepared staff for the operations and management of a media service.

________% Other (if greater than 10% describe)
Total 100%

11. Of the following, which best describes your present media responsibilities?

☐ Distribution of hardware and software to users.

☐ Working directly with teachers, students and administrators in designing, implementing, and evaluating the total process of learning and teaching in terms of specific behaviors.

☐ Other ______________________________
____

12. What is your present professional affiliation?

☐ Elementary-Secondary School
☐ County-District Agency
☐ State Educational Agency
☐ Community College or Technical Institute
☐ College or University
☐ Business and Industry
☐ Military
☐ Government
☐ Other ______________________________

13. As a result of the media specialist training, have you conducted any workshops or inservice programs for teachers?

☐ Yes ☐ No

14. If your answer to question 13 was 'no', please continue to question 17. If 'yes', what professional level(s) attended your workshop(s) or inservice programs?

☐ Paraprofessionals
☐ Elementary Classroom Teachers
☐ Secondary Classroom Teachers
☐ Elementary Supervisors and/or Principals
☐ Secondary Supervisors and/or Principals
☐ College Instructors and/or Professors
☐ Others (please describe)______________________

15. How many media workshops or inservice programs have you conducted?

☐ 1-5
☐ 5-10
☐ 10-15
☐ 15-20
☐ 20-25
☐ over 25

16. How many have participated in your media workshops or inservice programs?

☐ 1-50
☐ 50-100
☐ 100-150
☐ 150-200
☐ 200-250
☐ 250-300
☐ 300-350
☐ 350-400
☐ 400 - over

17. Is your salary based on the same schedule as classroom teachers or do you receive an additional increment due to your media responsibilities?

☐ Same salary base as classroom teacher.

☐ Yes, in dollars.

If 'yes', what is the amount of the increment?

☐ $100-300
☐ $300-600
☐ $600-900
☐ $900-1200
☐ $1200 - over

18. Since your participation in the media institute, have you held positions other than your present assignment?

☐ Yes ☐ No

If 'yes', indicate the reason you chose to move to a new assignment.

☐ was disenchanted with school system after **institute** training.
☐ new opportunity as a result of institute training.
☐ other (please describe)____________________

____

____

19. What was your job title at the time you entered the media training institute?

____

20. Categorize your responsibility in the job described in question 19 by indicating the relative percentage of time devoted to each category: (For definition of responsibility levels, refer to question 9.)

________% Directive-Administrative

________% Professional

________% Artistic-Technical

________% Clerical-Manual

________% Other____________________

Total 100%

21. What percentage of your media responsibilities were devoted to the following functions before you entered the media institute? (For definition of functional areas, refer to question 10.)

________% Research

________% Evaluation

________% Design

________% Production

________% Logistics

________% Utilization

________% Organizational Management

________% Information Management

________% Personnel Management

________% Other (if greater than 10%, describe)____________________

Total 100%

____

22. What was your professional affiliation immediately prior to entering the institute?

☐ Elementary-Secondary School

☐ County-District Agency

☐ State Educational Agency

☐ College and University

☐ Community College or Technical Institute

☐ Business and Industry

☐ Military

☐ Government

☐ Other

23. Rank order from 1 to 7 those activities you think were most valuable to you as an institute participant in meeting the institute objectives. (1= most valuable; 7= least valuable)

_______ Scheduled classroom activities conducted by Institute staff

_______ Guest Lectures (consultants)

_______ Self-instructional Programs

_______ Production Labs

_______ Field Experience (practicum)

_______ Simulation Activities

_______ Professional Experiences (national conventions, local chapters of professional organizations, etc.)

_______ Other_______________________________________

24. Rank 4 of the following items which best characterize the content presented in your institute. (1 = most important, 4 = less important)

_______ Communications

_______ Computers

_______ Graphics Production

_______ Instructional Development

_______ Library Training

_______ Others (please list)_______________________________

____

_______ Media Operation

_______ Photography

_______ Programed Instruction

_______ Retrieval System

_______ Television

25. Rank 4 of the following items which least characterize the content presented in your institute. (1 = that which is least important; 4 = that which is more important)

_______ Communications

_______ Computers

_______ Graphics Production

_______ Instructional Development

_______ Library Training

_______ Other (please list)_______________________________

____

_______ Media Operation

_______ Photography

_______ Programed Instruction

_______ Retrieval System

_______ Television

26. Which of the following best describes the media training you received in the institute?

☐ Extremely Adequate (in relation to institute objectives)

☐ Very Adequate

☐ Adequate

☐ Somewhat Adequate

☐ Not Adequate

27. How adequate were the media facilities and equipment available during the institute for accomplishing learning objectives?

☐ Extremely Adequate

☐ Very Adequate

☐ Adequate

☐ Somewhat Adequate

☐ Not Adequate

28. Which of the following was/were most beneficial in preparing you for your current job?

☐ Technical Institute

☐ Community College

☐ Four-Year College

☐ Graduate School

☐ Media Institute

☐ On-the-Job

☐ Others (describe)____________________________

____

29. If attending a media specialist institute, what content area is critical to you in order to perform your job responsibilities with greater efficiency?

30. What do you feel the major emphasis of media institutes should be in the immediate future?

31. Please use this space for any additional comments you wish to make relative to your media training institute. (Continue your response on the back if more space is needed.)

APPENDIX D

The responses from 69 educational media institute directors are presented in Tables B-1 through B-20, Appendix B.

Provided in this appendix is a copy of the questionnaire and accompanying correspondence sent to institute directors. About 1/5 of the directors responded to the first mailing. A second mailing was somewhat productive, bringing the total response to about 1/3 of the institute directors.

Leadership Training Institute

lti

Cover Letter to Institute Directors

The Leadership Training Institute is conducting a retrospective analysis of educational media training institutes. Our questionnaire seeks information about the NDEA or EPDA media institute conducted by you during the period 1965-1971. The purpose is not to evaluate each institute but to collect data on all educational media institutes. Data furnished by you, along with a document search, will be used to provide information for planning and upgrading future educational media institutes as well as developing an operational time-activity model of past and present educational media institutes.

There is a number in the upper right corner of the first page. This number is for follow-up purposes only. Your response will be held in strict confidence by the staff.

The value of this study depends on the questionnaires being completed and returned. We urge you to take approximately 30 minutes to complete the questionnaire. When you have completed the questionnaire, use the enclosed self-addressed, stamped envelope for mailing. Your early attention will be greatly appreciated.

Sincerely,

Desmond P. Wedberg

Desmond P. Wedberg
Director

Enclosures

DPW/dms

Educational Technology Center, College of Education, University of Maryland, College Park, Maryland 20742, Telephone 301 454 4017

Supported by a grant from the National Center for Educational Technology, U.S. Office of Education

Leadership Training Institute

lti

January 29, 1973

FOLLOW-UP LETTER TO INSTITUTE DIRECTORS

Yes, you've probably seen the enclosure before. (We sent it out in November and hoped to have a report on the responses ready by January 30.)

The U.S. Office of Education has granted a short 'stay-of-execution' for submission of our final report, "A Retrospective Analysis of Educational Media Training Institutes (1965-71)," in that less than one out of two directors have responded to date. We anxiously hope to get a more representative response to the questionnaire so that the figures will give a more accurate picture of the institute program from 1965-71. We feel this composite data is very important, both in chronicling the evolution of educational media training and in giving direction for future programs.

Thank you for taking your valuable time to fill out this questionnaire, and please drop it in the mail to us by FEBRUARY 10.

Cordially,

Desmond P. Wedberg
Director

Enclosure

Educational Technology Center, College of Education, University of Maryland, College Park, Maryland 20742, Telephone 301 454 4017

Supported by a grant from the National Center for Educational Technology, U.S. Office of Education

QUESTIONNAIRE

FOR

INSTITUTE DIRECTORS

LTI RETROSPECTIVE ANALYSIS

OF

MEDIA SPECIALIST TRAINING
(1965-71)

lti

11/72

LTI RETROSPECTIVE ANALYSIS OF MEDIA SPECIALIST TRAINING (1965-71)

QUESTIONNAIRE FOR INSTITUTE DIRECTORS

1. Name of Director: ______________________________

2. Address of Institution: ______________________________

3. Date of Institute: ______________ to ______________
Beginning Ending

4. Total Direct Cost:

   a. Federal Support ______________________________

   b. Other (Please list) ______________________________

   ____

   ____

5. Total Number of Participants: ______________________________

6. What number of your participants came from the following institutional settings?

   ______ elementary-secondary

   ______ county-district agencies

   ______ state educational agencies

   ______ community college or technical institute

   ______ colleges and universities

   ______ business and industry

   ______ military

   ______ government

   ______ other ______________________________

7. What percentage of your media specialist institute was devoted to developing the following functional competencies?

____% research	Research is defined: To generate and test theory, develop products and the methodology of instructional media.
____% evaluation	Evaluation is defined: To provide information to those individuals responsible for instructional programs to allow them to make appropriate adaptive decisions regarding the management, development, and utilization of media in instruction.
____% design	Design is defined: To translate theory and empirical evidence about learners, subject matter, mediating forms, settings and techniques into instructional systems specifications.
____% production	Production is defined: To make specific instructional products by following design specifications and artistic standards.
____% logistics	Logistics is defined: To provide acquisition, storage, supply and maintenance support to the appropriate operations and management of media in instruction.
____% utilization	Utilization is defined: To employ media in an instructional setting for the purpose of bringing about desired specific changes in learners.
____% organizational management	Organizational Management is defined: To plan, establish and maintain the organizational structure necessary to support the activities required in the operations and management of media services.
____% information management	Information Management is defined: To plan, establish and maintain the means for supplying essential information, both internal and external, necessary to the operations and management of a media service.
____% personnel management	Personnel Management is defined: To provide qualified and adequately prepared staff for the operations and management of a media service.

____% other (if greater than 10% describe).

Total 100%

8. Please check the responsibility level (for which you were training participants) which best describes the main thrust of your institute. (If you desire to check more than one item, please indicate the relative percentage of time allocated to each item.)

check		
☐ Directive-Administrative	____%	The Directive-Administrative grouping includes job activities that represent top administrative and management responsibilities which are necessary to control media operations.
☐ Professional	____%	The Professional grouping includes job activities that are responsible to work directly in the use of media with learners and learning problems.
☐ Artistic-Technical	____%	The Artistic-Technical grouping represents job activities that are responsible to work directly with media in support of the professional type activities, e.g., graphics artist, photographer, etc.
☐ Clerical-Manual	____%	The Clerical-Manual grouping refers to job activities that are necessary to support all other media-related type jobs.
☐ other (please describe)	____%	____________________
Total	100%	____________________

9. What percent of time in the institute was spent in the following types of activities?

____% scheduled classroom lectures conducted by institute staff

____% guest Lecturer (consultants)

____% self-instructional programs

____% production labs

____% field experience (practicum)

____% simulation activities

____% professional experiences (national conventions, organization of local chapters of professional organizations, etc.).

____% other (please describe). ____________________

____

Total 100%

10. Rank order from 1 to 7 those activities you think were most valuable to your institute participants in meeting the institute objectives. (1 = most valuable; 7 = least valuable)

____ scheduled classroom lectures (institute staff)

____ guest lectures (consultants)

____ self-instructional programs

____ production labs

____ field experience (practicum)

____ simulation activities

____ professional experiences (national conventions, organization of local chapters of professional organizations, etc.)

____ other (please describe) ____________________

____

11. Rank 4 of the following items which best characterize the content presented in your institute. (1 = most important; 4 = less important)

____ Communications

____ Computers

____ Graphics Production

____ Instructional Development

____ Library Training

____ Others (please list) ____________________

____

____ Media Operations

____ Photography

____ Programed Instruction

____ Retrieval Systems

____ Television

12. Rank 4 of the following items which least characterize the content presented in your institute. (1 = that which is least important; 4 = that which is more important)

____ Communications

____ Computers

____ Graphics Production

____ Instructional Development

____ Library Training

____ Others (please list) ____________________

____

____ Media Operations

____ Photography

____ Programed Instruction

____ Retrieval Systems

____ Television

13. Give number of participants in your institute to whom the following type(s) of commitment (from participant's school system) applied.

(number)

____ release time for media activities on participants return to the school system

____ monetary support for participants during the institute

____ creation of new position for participants on return to school system

____ release time for participant to be involved in institute (academic leave, sabbatical)

____ no commitment on part of school system

____ other (describe) ____________________

14. What long-term change, at your institution, was brought about by the media institute?

☐ waiver of tuition for institute participants desiring to take further academic work at same institution

☐ institution itself sponsored similar media specialist training institutes

☐ faculty donation of time for similar media training

☐ expansion of formal academic program (introduction of new courses in the media program)

☐ increased tuition-paying enrollment in formal academic (media) program

☐ additional space and/or equipment procured in your institution

☐ increase in staff and/or facilities

☐ increase in budget for media program

☐ national recognition

☐ other (please describe) ____________________

____

15. At the time of your institute, which of the following employers contacted you regarding openings (job vacancies) for media specialists?

_____% elementary-secondary

_____% county-district agencies

_____% state educational agencies

_____% community college or technical institute

_____% colleges and universities

_____% business and industry

_____% military

_____% government

_____% other ____________________

____

Total 100%

16. For which responsibility level were the job vacancies described in question 15? (If you desire to check more than one item, please indicate the relative percentage of time allocated to each item.) (For definition of responsibility levels, refer to question 8.)

☐ Directive-Administrative _____%

☐ Professional _____%

☐ Artistic-Technical _____%

☐ Clerical-Manual _____%

☐ other (please describe) _____% ____________________

Total 100 %

____

17. At present, which of the following employers contact you most frequently regarding openings (job vacancies) for media specialists? (Respond on the relative percentage of contacts.)

_____% elementary-secondary

_____% county-district agencies

_____% state educational agencies

_____% community college or technical institute

_____% colleges and universities

_____% business and industry

_____% military

_____% government

_____% other ____________________

Total 100 % ____________________

18. For which responsibility level are the job vacancies described in question 17? (Base your response on the relative percentage of contents.) (For definition of responsibility levels, refer to question 8.)

_____% Directive-Administrative

_____% Professional

_____% Artistic-Technical

_____% Clerical-Manual

_____% Other (please describe) ______________________________

____

Total 100 %

19. Did you exchange (loan or borrow) software developed by or recommended by other media institute personnel (at other institutions)?

☐ yes ☐ no

If yes, please describe material: ______________________________

____

____

____

____

20. In what new content or training areas would you, as an institute director, like additional information? (Continue your response on back if additional space is needed.)

21. Based on your assessment of current needs and developments, what new directions and content should future institutes include?

22. Please use this space for any additional comments you wish to make relative to your media training institute. (Continue your response on back if additional space is needed.)

Leadership Training Institute

November 17, 1972

MEMORANDUM

From: Desmond P. Wedberg DPW
Director, Leadership Training Institute

To:

The Leadership Training Institute, sponsored by the Office of Education, is conducting a retrospective analysis of educational media institutes from 1965 to 1971. Our schedule is to complete the study by January 1973. As you can see, time is our greatest enemy in accomplishing this task.

We seek your cooperation as a former institute director. From your files we need the information checked.

___ (1) Plan of Operation for ________ .

___ (2) Final Report for ______________ .

___ (3) Names and addresses of participants for ___________ .

Your immediate attention to the mailing of these items will be greatly appreciated. Please send them to:

Lew Bias
Educational Technology Center
College of Education
University of Maryland
College Park, Maryland 20742

Educational Technology Center, College of Education, University of Maryland, College Park, Maryland 20742, Telephone 301 454 4017

Supported by a grant from the National Center for Educational Technology, U.S. Office of Education

APPENDIX E

Educational Media Institutes: 1966, 1968 and 1971

(location, director, number of participants)

TABLE E-2.--1968 Educational Media Institutes

Institution	Director	Number of Participants	Number of Questionnaires Mailed
Auburn University	Thomas Miller	50	50
Arizona State University	Vernon S. Gerlach	40	40
Boston University	Gaylen B. Kelley	30	30
Bridgeport, University of	George Ingham	30	30
Colorado, University	Robert E. deKieffer	30	30
Colorado, University of	Louis H. Brown	40	0
Hawaii, University of	Geoffrey Z. Kucera	50	50
Idaho, University of	Gordon A. Law	30	30
Kentucky, University of	Ollie Bissmeyer	180	180
Marygrove College	Sister Gilmary	35	35
New Hampshire, University of	Paul G. Spilios	50	50
North Carolina, University of	Kenneth M. McIntyre	30	30
Oregon State System of Higher Education	Ray Adams	50	50
Pennsylvania, University of	Hugh M. Shaffer	90	90
Purdue University	Franz Frederick	40	40
San Jose State College	Harold H. Hailer	30	30
State University of New York at Potsdam	Robert C. Henderhan	30	0
Utah, University of	Donald Brumbaugh	30	30
Virginia State College	Harry Johnson	30	30
Washington, University of	Gerald M. Torkelson	50	0
West Virginia State College	Charles Byrd	40	40
		955	865

TABLE E-3.--1971 Educational Media Institutes

Institution	Director	Number of Participants	Number of Questionnaires Mailed
Boston University	Gaylen Kelley	8	8
Board of Cooperative Educational Services	Jack Tanzman	30	30
Bridgeport, University of	George E. Ingham	8	8
Clarion Area Regional Instructional Materials Center	Wayne E. Goss	9	0
Gorham State College	Allen W. Milbury	20	0
Hawaii, University of	Walter A. Wittich	10	10
McNeese State University	Clarence Hughes	30	0
Maryland, University of	Vernon Anderson	24	24
Michigan State University	Paul W. F. Witt	11	10
New Hampshire, University of	M. Daniel Smith	0	0
North Carolina State Department of Public Instruction	James Carruth	179	179
Puerto Rico, University of	T. G. de la Luz	24	24
Southern California, University of	Herbert R. Miller	8	0
Syracuse University	Donald P. Ely	?	0
Teachers College, Columbia	Phil Lange	30	0
Virginia State College	Harry Johnson	28	28